

BUSINESS WEEK

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Pentagon's Anderson: In government, a taste for politics helps (page 106)

A MCGRAW-HILL PUBLICATION

JUNE 18, 1955

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predict that within five years complete temperature control units will be included in most new homes. The room air conditioner with a reverse cycle which permits either heating or cooling of the area served, as well as the electrostatic air cleaner, are two recent developments which will create new demands for air conditioning equipment.

Today, there are plans on the drawing board for an entirely air conditioned shopping center — in-

cluding sidewalks and public areas—all to be served by a central plant. Total annual sales of the industry are expected to skyrocket to \$5 billion within the next decade.

The air conditioning industry is playing a big part in America's growth and achievement. It is another demonstration of how the invigorating climate of freedom stimulates business to progress and accomplishment in which all the people share.

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BUSINESS WEEK • JUNE 18 • NUMBER 1346

(with which are combined The Annalist and the Magazine of Business) Published weekly by McGraw-Hill Publishing Company, Inc. Executive, Editorial, Advertising, and Subscription Offices: McGraw-Hill Building, 330 West 42nd Street, N. Y. 36, N. Y. Publication Office, 99-129 North Broadway, Albany 1, N. Y.; entered as second class matter Dec. 4, 1936 at the Post Office at Albany, N. Y., under act of Mar. 3, 1879. Donald C. McGraw, President; Paul Montgomery, Executive Vice President; Joseph A. Gerardi, Vice President and Treasurer; John J. Cooke, Secretary; Nelson Bond, Executive Vice President, Publications Division; Ralph B. Smith, Vice President and Editorial Director; Joseph H. Allen, Vice President and Director of Advertising; J. E. Blackburn, Jr., Vice President and Circulation Director. **FOR SUBSCRIPTIONS,** write to: Business Week, Subscription Service, 330 West 42nd Street, New York 36, N. Y. Subscriptions to Business Week are solicited only from management men in business and industry. Position and company connection must be indicated on subscription orders. Subscription rates: United States and possessions \$6 a year; \$12 for three years. Canada \$7 a year; \$14 for three years. Other Western Hemisphere countries and the Philippines, \$20 a year; \$40 for three years. All other countries \$25 a year; \$50 for three years. Single copies, 25c. Printed in U.S.A. Copyright 1955 by McGraw-Hill Publishing Co., Inc. All rights reserved.

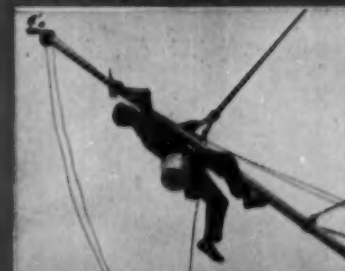
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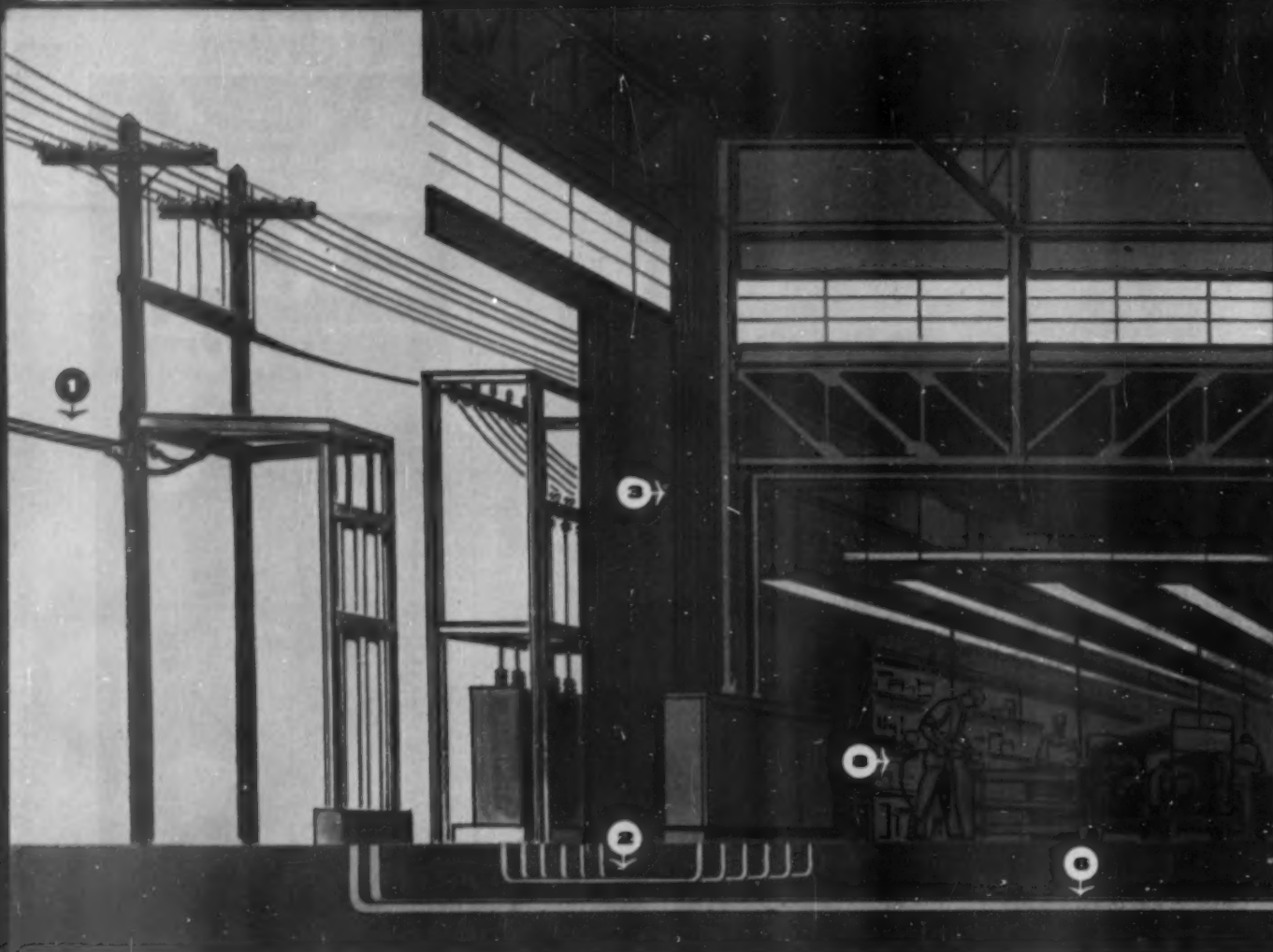


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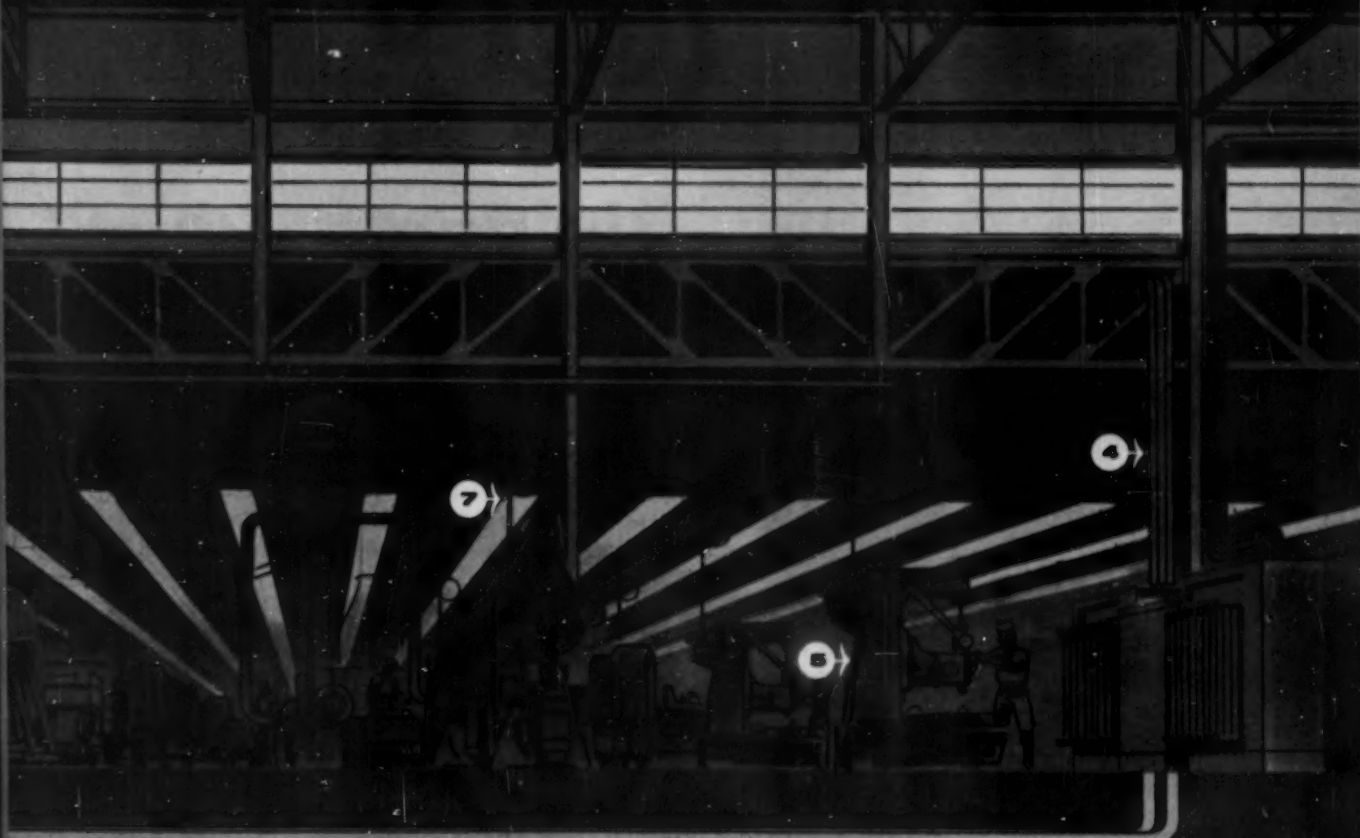
All around the plant, modern Anaconda wires and cables help industry reap the benefits of more efficient power, greater reliability, and long-range economy. Read on the following page the exciting facts about 1) new Aerial Cable, 2) new AHW moisture-resistant cable,

IT'S TIME TO TAKE A

Most manufacturers know inadequate plant wiring slows production and skyrockets costs.

But wiring can be adequate and still waste money—because it's obsolete! Here from Anaconda are the facts on what you can do to make your wiring as up-to-date as the rest of your operations.

(Advertisement)



3) rugged, corrosion-free Durasheath neoprene-jacketed cable used as feeders, 4) low-cost Interlocked Armor Cable, 5) new Control Cables, 6) ozone-resistant Butyl insulation for high-voltage cable, 7) Powerduct flexible busduct cable that increases the efficiency of busway systems, and 8) portable cords.

NEW LOOK AT WIRING!

Plant wiring today has become a major concern for management everywhere.

The reasons are easy to see. Shifting plant requirements, new tools, new materials, new handling procedures—all the great changes in modern industry are bringing with them special problems in power.

How these problems are solved has a direct bearing on your profit picture.

Since most plants were built—including some only a few years old—vast advancements in wires and power cables have taken place.

For example—new, thinner insulations today squeeze more capacity from existing conduit. New heat-resistant compounds boost wire cur-

rent-carrying capacity. Tough new jacketing materials increase cable life. New cable designs enable manufacturers to find even more jobs for low-cost, efficient electric power.

Top management has a big stake in seeing that plant wiring is up-to-date. Though you must rely upon the knowledge and experience of qualified electrical experts when wiring up, acquaintance with modern industrial wires and cables will help you guide your company to sound decisions.

**TURN THE PAGE AND SEE WHAT
MODERN WIRING CAN DO FOR YOU**

(Advertisement)

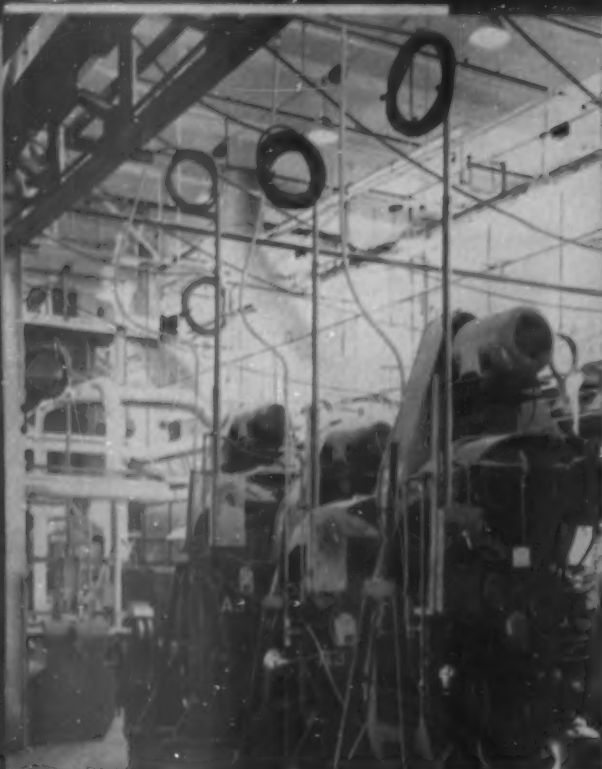
IT'S TIME TO TAKE A NEW LOOK

7 ways modern costs down,


The nerve-system of your plant is its electric wires and cables. And now — with new production and operating factors in the picture — it's time for a basic survey. If they're obsolete, it will pay you to replace them . . . with new, more efficient, more economical ones.

Modern wiring has seen a wealth of new developments. Let's take a quick look at 7 of the most important of these *in light of changes that have probably taken place in your plant since the original wiring was installed.*

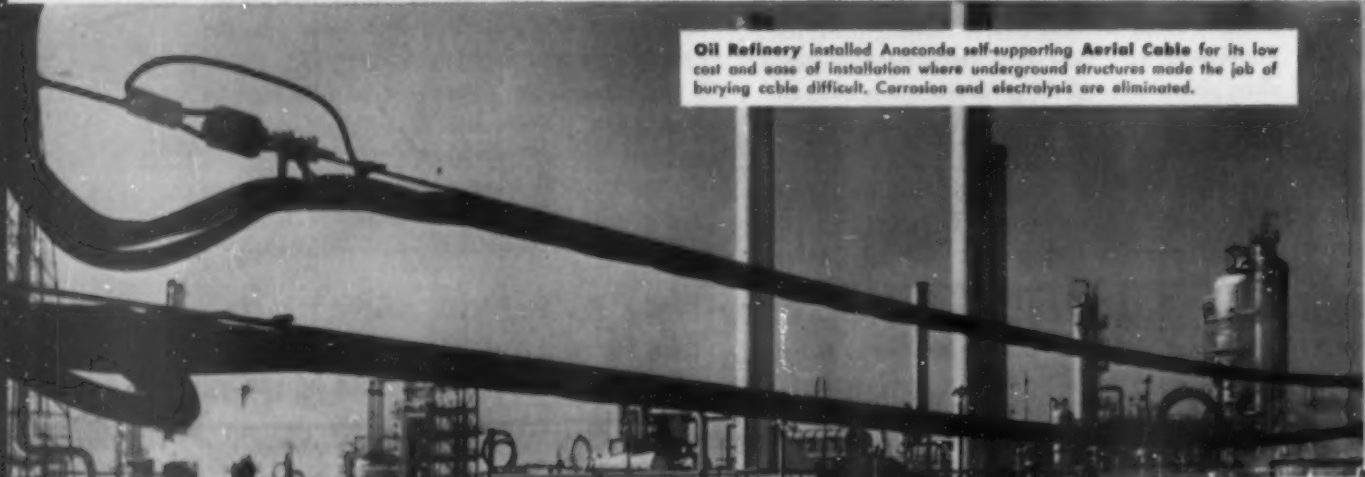
1. **NEW HIGHER VOLTAGES.** The trend to higher plant voltages — with its resulting savings in cable costs and line losses — poses a new problem: ozone, a by-product of high voltage, destroys ordinary insulation . . . and causes premature cable failure. Anaconda engineers have solved this problem with pioneering work in new *butyl* rubber. It has *inherent* resistance to ozone. Higher voltage (and ANACONDA butyl-insulated power cables) ought to come high on your list of cost-cutting ideas to talk over with your electrical department or contractor.
2. **NEW CABLE HAZARDS.** Chemicals, moisture, oil — natural to most modern plants — are tough on cable. Engineers at Anaconda have come up with an answer: Dura-sheath® rubber-insulated, neoprene-jacketed cable for all voltages. This rugged cable resists almost *every* enemy of cable life. Use it everywhere — aerially, in ducts, or buried directly in the ground — you'll find it reduces downtime, maintenance and replacement costs.
3. **NEW OPERATING CONDITIONS** put new demand upon wiring. Higher loads generate higher heat in cable . . . and more heat in cable installed underground or in other



Metalworking plant eliminates expensive rewiring when equipment must be moved—by using flexible Anaconda Powerduct Cable from busduct to machine.



Steel Mill uses thousands of feet of Anaconda Control Cable. Modern insulations and jackets give most reliable service ever where there's heat and moisture.



Oil Refinery installed Anaconda self-supporting Aerial Cable for its low cost and ease of installation where underground structures made the job of burying cable difficult. Corrosion and electrolysis are eliminated.

AT WIRING!

wiring keeps production high

moist locations is tough on cable insulation. Today, AHW rubber insulation, used on many ANACONDA rubber power cables, does the best job ever in withstanding *heat and moisture together* at 80C operating temperature.

4. **NEW EQUIPMENT.** The addition of process-heating equipment, process or comfort air conditioning, or new production machines calls for more wiring to carry the load. ANACONDA Interlocked-Armor Cable can be installed up to 40% quicker than many other types of cable because it needs no conduit. You save time and money when the cable is installed — and later, too, if cable must be moved.
5. **MODERN BUSWAY SYSTEMS.** Today you can increase the flexibility of your busways — with Anaconda's flexible Powerduct® Cable. It just plugs into the busduct . . . and unplugs when you want to move machines. There's no costly conduit to put up or rip out. And the cable is 100% salvageable on every move!
6. **NEW POWER.** When additional power is needed, ANACONDA Aerial Cable is today's popular choice for the job, especially where the ground is packed with pipes and other structures or contains corrosive agents. It is fast, easy to install even between closely spaced buildings where clearance is limited. It's neat, safe, lower in cost than underground systems, and gives highest *reliability*.
7. **NEW ELECTRIC EQUIPMENT.** The trend to automation and more complex machines puts new emphasis on control cable. The job cannot be left up to cable whose performance is just "so-so." Anaconda's years of cable experience has paid off in a new full line of control cables — with modern types of insulations and coverings to give them highest reliability. These cables assure you the best possible service from your new equipment.

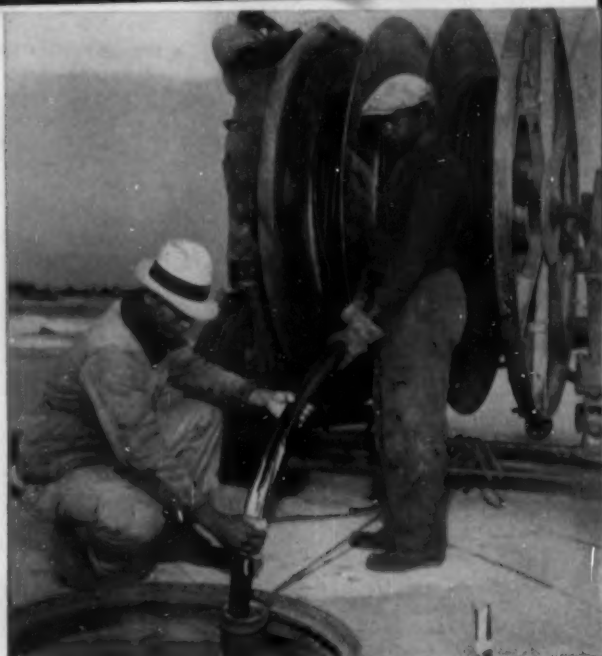
This advertisement provides only a few examples of how modern Anaconda wires and cables help industry wire up for more economical, more efficient production. Your electrical department or electrical contractor can give you personal and expert assistance with your needs.

*Reg. U. S. Pat. Off.

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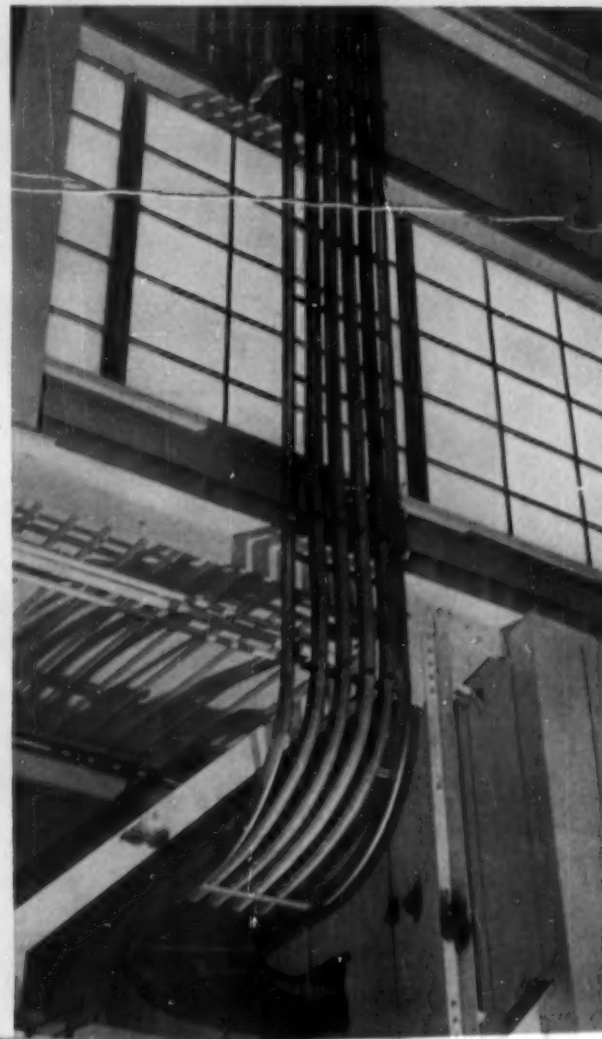
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READERS REPORT



Formula for a Mystery

Dear Sir:

The article, "The Mystery of Executive Talent," in the May 21, 1955 issue of BUSINESS WEEK [page 43] was . . . most interesting and thought provoking.

[It] suggests two schools of thought on the subject. One employs an empirical method of selection, while the other relies on the judgment of an individual or group. The first has not yet developed a completely satisfactory method; the effectiveness of the second is limited by bias and subjective elements. . . .

We have developed a pattern [see above] into which most of these factors fit [that] might shed some light on the problem. The pattern consists of four primary causes or factors. They are aptitude, training, temperament, and environment. . . . The first two determine skill; the last two influence attitude. The resulting skill and attitude will determine efficiency. Judgment will largely influence how efficiency is used. Each of these factors contribute to success, and any one factor can be the cause of failure.

Aptitude, training, and skill are relatively tangible and can be determined by statistical methods. However, temperament, environment, and attitude are intangible. Because of the nature of these last three factors, the judgment method must be used in appraising them.

. . . With the future shortage of executive talent facing us, it appears desirable to develop a clearer understanding of these intangibles.

RUSH H. PEARSON

MONTGOMERY, ALA.

Dear Sir:

For purposes of favorable illustration in connection with discussions, I wish to use the article, "The Mystery of Executive Talent."

I have enjoyed my subscription to BUSINESS WEEK very much and

find in it a wealth of information of great value of other than the technical aspects of particular industries. The matter of what constitutes good administrative ability, for example, is of just as great importance to those of us in the academic world as those in business.

FRANCIS F. POWERS

DEAN

UNIVERSITY OF WASHINGTON
SEATTLE, WASH.

Dear Sir:

The article, "The Mystery of Executive Talent" reads like an interim report on the progress of the free enterprise system in this country. It should be of special interest in several European countries where the system is now being given something of a reluctant trial.

Why is it that "good executives are always at a premium"? Are we running short of "raw material" and has somebody been able to corner the existing supply? No indications are in sight that this could be the case.

What the researchers in this field seem to be after is a formula for spotting potential executive talent for the use of the personnel in employment departments. This is generally known to be a forlorn hope but there persists the idea that some workable approximation may result as a byproduct of the research. What is really needed is a mechanism that will indicate positive qualities in the same way the lie detector is said to register the negative!

[Here are] a couple of suggestions:

In the first place only an executive can spot and evaluate another executive with capacities equal or lesser than his own.

Then it is often overlooked that executive talent is of five principal types. Most of the confusion, disappointment, and prodigious waste that seems inevitable in the search

Two ways of fighting fires ...



With Sprinklers — This is how the furniture factory of Irving & Casson — A. H. Davenport Company, Cambridge, Mass., looked at the "height" of its fire. When a flash blaze occurred in the paint department last December, a Grinnell Automatic Sprinkler System, installed about 1900, went into action immediately, saving the firm from disaster.



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Grinnell Automatic Sprinkler System reduces fire insurance premiums from 50% to 90%, it will be recognized as an investment that pays for itself, and then starts paying you substantial cash dividends.

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Motor parts for
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for reversing service.

for talent probably can be traced to this. In general these types can be described as: (1) Coordinator, (2) Research, (3) Action or go-getter, (4) Production or mechanical skill, and (5) Routine or glutton for detail. No single individual or even superman should be expected to excel in all of these executive operations. Perhaps we have been expecting too much of the four year college course.

Finally, men should rarely be assigned to a job. There must be proper facilities for "natural selection" so that the right men can apply for, or offer to undertake, the responsibilities.

ROBERT L. STEWART
HUNTINGTON PARK, CALIF.

Dear Sir:

The article on executive talent is an excellent presentation of the variation in judgment on how to identify and develop executive talent. There is, indeed, a clear need for more practical, long-range research.

I question that management is utilizing present knowledge of what makes a good executive in two significant respects.

First, I feel keenly that many executives are prone to overlook the tremendous significance of the day-to-day relationships of a boss and his subordinates, especially at the lower management levels where young men are developing. The bright engineering graduate of four years ago will hardly exhibit management potential, even with a year of rotational training, if his superiors' perspective is limited to developing a good draftsman. Two out of forty hours a week in a management training conference cannot be expected to make up the difference.

Secondly, I believe that executives generally provide for much more orderly learning of a function for which a man may be responsible than for managing the persons who will carry out the specifics. A man . . . may have excellent technical experience for the position. Yet, at age 41, with 20 years of company service, his only personnel responsibilities may have been for seven employees in the position he filled for the past two years.

M. J. TIESZEN

CHICAGO, ILL.

For Women Only

Dear Sir:

I read your article about the Edison Bros. shoe chain in the



change **wasted space**
to **working space ...**

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New Johns-Manville Class A Movable Walls offer you advantages never before combined in an asbestos movable wall. They are modestly priced. They are noncombustible. They have a textured, stipple finish in restful colors. They reduce maintenance and relocation costs to a new low.

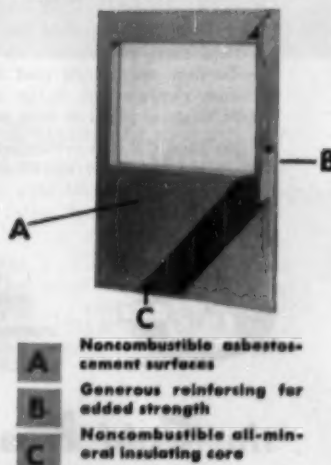
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. . . less wear on dies . . . fewer die changes and "regrinds."
. . . easier fitting and assembly . . . fewer "oversize" rejects
. . . less tedious "resizing" to make oversize parts fit.

More important . . . in many cases, CMP Cold Rolled Strip Steel can be processed to restricted physical specifications to facilitate, consolidate or even eliminate labor-consuming production operations and handling. Often, a simple specification change can do as much or more to reduce manual costs than expensive new equipment.

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FOR
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March 26, 1955 issue [page 50] with great interest. . . .

It seems to me that there were several shoe chains in popular prices that started before the Edison Bros. . . . They may not have expanded as fast but nevertheless some of them are still in business with stores from coast to coast. Some of the popular priced shoe chains are as old and some of them have operated stores before Edison Bros.

KURT GLASER

SALT LAKE CITY, UTAH

• Our checking reveals that Edison Bros. is the only major shoe chain in the country which is a women's specialty shoe chain dealing exclusively in women's fashion shoes at popular prices.

Figures Reconciled

Dear Sir:

In reading over your May 28, 1955 issue, I note on page 17 under Business Outlook that the gross national product in the U. S. for the year is estimated at \$380-billion.

Turning the page, I read that incomes are also breaking records in that you estimate the "disposable income" for this year at above \$260-billion.

I find it difficult to reconcile these two figures and would appreciate a word of explanation. One's first impression on reading these two figures is that we are heading into a king-sized bust at the rate of about \$100-billion a year and this I find hard to believe.

N. S. WILDMAN

ASST. GENERAL MANAGER
ROYAL METAL MANUFACTURING
CO., LTD.
GALT, CANADA

• These two terms mean different things.

Gross national product is the value of the nation's total output of goods and services including such things as new private construction, additions to inventory, net foreign investment, and investment in plant and equipment.

Disposable personal income is only a fraction of this total. It is the income remaining to the consumer after deduction of taxes and social security contributions.

Gross national product is the figure you use to measure changes in size of our over-all economy. Disposable income is the best indicator of the potential size of the consumer market.

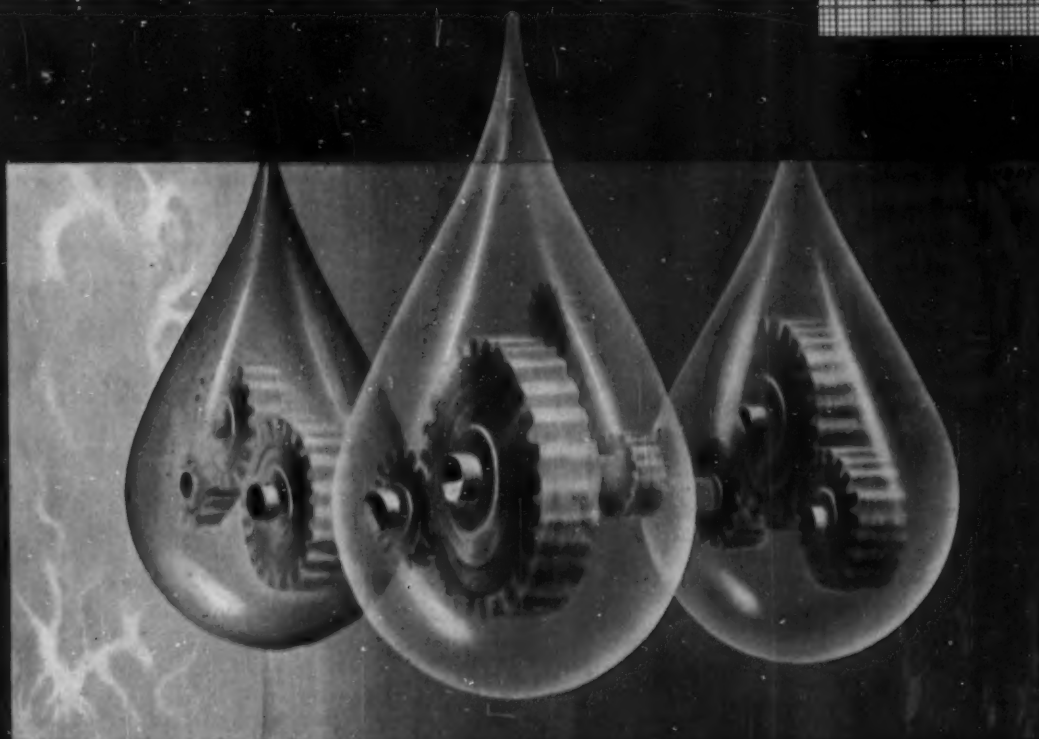
Q. Could chemical research find a way to put the amazing temperature resistance of silicones to work in the lubrication field?

A. LUBRICANTS WILLING TO WORK AT 100° BELOW...OR 500° ABOVE ZERO!

Another example of



**CHEMICAL
PROGRESS**



You've heard a lot about silicones—G.E.'s chemical prodigy of the early forties that has far exceeded expectations in little more than a decade.

Now from G-E laboratories comes a new "first" in silicone chemistry—silicones that possess excellent lubricating properties throughout a wide range of temperature extremes. Equipped with the amazing properties that have made silicones famous, these new fluids and greases will go to work at temperatures ranging from -100° to $+500^{\circ}\text{F}$.

General Electric research is currently directed toward developing fields of applications for its new experimental lubricants. Soon silicones will be smoothing the operation of many lubricating systems

—improving present performance or making new designs possible. This is progress for all—through G-E chemical progress.

★ ★ ★

For new developments in Plastic Compounds, Silicones, Electrical Insulating Materials, Industrial Resins and Varnishes, Plastic Laminating and Molding . . . write for "G-E Chemical Products" booklet (CDG-101) to: **CHEMICAL and METALLURGICAL DIVISION**, General Electric Company, Section 1500-3A Pittsfield, Mass.

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"TUG" WILSON'S

Wausau Story

Kenneth L. "Tug" Wilson, Western Conference Commissioner and President of the U.S. Olympic Association, visited Wausau recently. His story appears in pictures and captions on this page. At lunch, Mr. Wilson told a group of Wausau businessmen and educators that he admired Wausau's energetic "personality." It's this same *personality*—straight-forward and businesslike—that policyholders like about Employers Mutuals' representatives.

For instance, Employers Mutuals believes in taking the

mystery out of workmen's compensation insurance.

Stated simply, our story is this: the cost of compensation depends upon accidents. Accidents are controllable. Thus, the cost of workmen's compensation insurance is, or can be, a cost you can control.

We have a reputation for being able to reduce insurance costs through the practical prevention of accidents. May we show you how you can reduce losses and costs with Employers Mutuals' supervision? Phone our nearest office, or write Wausau, Wisconsin.

"I found the Little League typical of Wausau's interest in sports. Three fields are provided for the youngsters' exclusive use. And the 1955 call for candidates brought out 500 kids! An even greater showing is the 1500 young people who

come out for winter sports. The Wausau Winter Sports Council gives instructions in skiing, skating and curling, free of charge. This is the community spirit that has made competitive sport so much a part of American life."



"Holiday from Apron Strings". Mr. Wilson with YWCA Instructor, Ruth Fox.

"I suppose most all Americans believe in physical fitness. Wausau people really put their belief into action. One fine example, for me, was the popular "Slim Gym" class at the YWCA. The "Y" encourages regular attendance by giving free baby-sitting service while the young mothers 'work out'."



Wausau hurdler, Jim Seefeldt, skims one for Mr. Wilson and Coach Smiley.

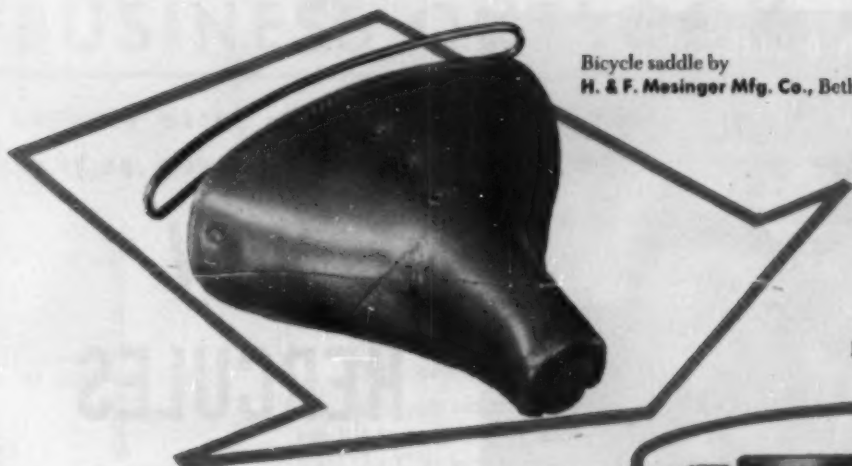
"Our future Olympic hopes depend on the support of cities like Wausau—the moral and financial support of citizens, and the enthusiasm of large squads like Coach Smiley's at Wausau High. The people of Wausau are solidly behind their athletes. It's the right kind of city for youngsters to grow up in. And that makes it my kind of city."



A close one at first! Mr. Wilson with George H. Stueber, one of Wausau's Little League Commissioners.

Employers Mutuals of Wausau





Bicycle saddle by
H. & F. Mesinger Mfg. Co., Bethel, Conn.



"Nomar" anchor by
Whitman & Robinson,
Weedsport, N. Y.



Blackstone Automatic Washer made by
Blackstone Corp., Jamestown, N. Y.

Plastisols used in these products
were formulated by
Stanley Chemical Co., East Berlin, Conn.

Products on the MOVE - - with Plastisols

Here's an anchor that won't mar boat decks, because it's coated with soft, resilient plastisol...

A tough, weatherproof bicycle saddle with a red leather grain, rivet heads—even the stitching—all one piece, molded from plastisol...

And a washing machine collector tank coated and sealed on the inside—the work side—with durable plastisol.

Does some product of yours have to operate under conditions like these? Sea water, sun, scalding water, soap, corrosion, chemicals, abrasion, flexing... plastisols based on **BAKELITE** Brand Vinyl Dispersion Resins take them all in stride.

Easy-flowing plastisols are simple to work with, either for coating or molding. Use them for dip-coating, slush molding, injection molding. They form with little or no pressure, without harm to an assembly's delicate components. A short bake fuses them into a firm, resilient material. They have good electrical insulating properties. They can be given almost any color you wish. Their finishes can be glossy or soft.

All these features result in a surprisingly low cost in terms of service and production advantages. For information and technical assistance in applying plastisols based on **BAKELITE** Vinyl Dispersion Resins, write Dept. HN-14.



BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation **UCC** 30 East 42nd Street, New York 17, N. Y.

The term **BAKELITE** and the Trefoil Symbol are registered trade-marks of UCC

MAKE A PICTURE IN A MINUTE



HOW HERCULES HELPS...

◆ **HERCULES CELLULOSE CHEMICALS**, made to the exacting specifications of Polaroid, are keys to the remarkable Land process which provides finished photo prints sixty seconds after a picture is taken.

... TRIM A HEDGE



◆ **LIGHT WEIGHT AND FAST CUTTING**, this electric clipper trims hedges, trees and shrubs in minutes instead of hours. Its strong, comfortable-feeling handle is made of Hercules Hercocel®—a flame-resistant acetate.

... RESIN-MAKERS SAVE MONEY



◆ **TAKE IT OR LEAVE IT:** One man, riding a lift truck, easily handles one ton of Hercules PE in this optional, unitized loading. Product itself is made to high degree of uniformity, under continuous automatic control, and is shipped under rigid particle specifications which assure maximum efficiency during chemical reactions.

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OTHER CHEMICAL PROCESSING MATERIALS



800-6

BUSINESS OUTLOOK

BUSINESS WEEK

JUNE 18, 1955



The automobile labor settlement wipes out a threat that has been hanging over business for months.

Fear of a shutdown in the giant automobile industry has been in the back of almost every businessman's mind. Granted that the business boom is rolling in high gear—could it keep rolling if a strike turned off Detroit's ordering?

That question is academic now.

Still, you can't expect the boom to keep on accelerating at the pace it has hit in recent months. We are getting too close to the physical limit of what the U. S. economy can produce with its present plant and present labor force.

Six months ago there was still plenty of slack in most lines. The 1953 recession had pushed operating rates down well below capacity.

So when the boom came, it could come with a rush.

Now we have taken up the slack in most lines. New gains will have to come from the comparatively few areas where there is still some catching up to do—and from plant expansion in the industries that are now running close to their limit.

Business will soon be spending record amounts on plant expansion. New capacity in steel, autos, building materials, and other hard-pressed industries will be coming in steadily.

But that sort of growth looks slow in comparison with the upward rush that carried us out of the recession and into the current boom.

There's still room for more production in machinery, textiles, apparel, some metalworking lines, and instruments.

Output in these lines, though rising, is still below the peak rates of 1953. If total industrial production is to show any dramatic gains in coming months, these are the industries that will have to do the gaining.

The construction industry—one of the mainstays of the general business boom—is running close to capacity.

Last month work was begun on 132,000 new homes.

That's more starts than in any month in almost 4½ years.

May's starts widened the margin over a year ago. Starts in April were 18% above the like 1954 month. In May, they were 22% ahead.

So many houses have been started now that 1955 is sure to go into the books as a record or near-record year—even if new starts turn down later.

Starts in May were hitting a seasonally adjusted annual rate of 1.3-million. That's down a shade from the 1.4-million rate the industry scored in the winter months. But it's still ahead of any year since 1950. And, in any case, seasonal adjustments don't mean much when an industry is producing at full capacity and popping its buttons in an effort to produce still more.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JUNE 18, 1955

Demand for schools, churches, and commercial buildings adds to the strain on the construction industry. Non-residential construction racked up new highs in the five months through May.

Private non-residential building was valued at \$5-billion—11% above the 1954 records for the same months.

Public building just about held its own. Rises in state and local works made up for shrinkage in federal spending for houses and industrial plants.

Consumers are still doing their share to keep steam in the business boiler.

Retail cash registers rang up another record month in May. And this makes the seventh record in a row for retailers.

Retail sales are now hitting close to \$185-billion at an annual rate. Since prices haven't changed much, that means business is moving 7½% more goods than it did at this time last year—and 5% more than it did in 1953, the year with the best previous showing.

Retail customers—while spending freely—aren't staging anything you could call a buying spree.

It is the big ticket hardgoods and some of the high quality luxury lines that are getting most of the customers' attention. Merchants say people are shopping carefully in these lines, paying close attention to price tags and quality.

Retailers' stocks have been expanding moderately in recent months despite record sales. Stocks have been growing about \$200-million a month, with most of it coming in autos and apparel.

This is just about the only place in the economy where you can spot an inventory build-up. And much of the rise is perfectly healthy. Merchants stripped their shelves down so far during the recession that they were losing sales because they didn't have goods to show.

However, there are some signs of a back-up. Westinghouse, for instance, will close down for three weeks this summer instead of the usual two at its Mansfield (Ohio) plant. Mansfield produces electric ranges, laundry equipment, electrical housewares. The long vacation will help "bring inventories of finished appliances into better balance."

Well filled shelves in the stores will make it hard for manufacturers to pass their higher wage costs along to consumers.

That's one reason why businessmen generally think the inflationary effects of the Ford settlement will be moderate (page 25).

The strongest upthrust on prices will come in areas where customers do relatively little of their spending—in metals and the metal using industries.

Of course, consumer spending for hardgoods is important. But it is only about 14% of total spending. Softgoods and services account for the other 86%.

So, it won't be until a lot of other industries have followed Detroit's lead that the rise in labor costs will have much effect on the cost of living.

"UPSTATE, N.Y."



THIS PICTURE shows one of the many important reasons why you should locate a plant or office in "Upstate, N. Y." It's because "Upstate" . . . from the Hudson River to the Niagara Frontier . . . is such a fine place to *live*.

Anywhere in Upstate there's a gorgeous vacationland right in your own backyard! When employees *like* to live where they work and own their own homes . . . production is bound to be greater and employee turnover lower.

There are lots of other big benefits waiting for you in Upstate . . . including huge markets, diversified transportation and plenty of low cost Niagara Mohawk electric power.

If you'd like to know more about what Upstate can offer *you*, write Earle J. Machold, President, Niagara Mohawk Power Corporation, Syracuse, N. Y.



The New York State Thruway flows through the heart of the Niagara Mohawk System—a growing area that has "everything", including some of the world's most beautiful vacationlands, typified by the famous Thousand Islands pictured at left.

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by
**NIAGARA
MOHAWK**

Quicker way to separate chemical Sheep from Goats



Major chemical developments frequently bring secondary results of far-reaching importance. A typical example is acid-washed aluminum oxide of high purity, which offers numerous industries a faster, lower-cost way to separate chemical "sheep" from "goats."

Merck Research May Have The Answer To Your Chemical Problem

If the problem you face involves chemistry, an excellent starting point is to consult Merck. The results of the Merck research program have proved so valuable to manufacturers in numerous fields that you, too, may find them helpful. A letter places you under no obligation. Please write to: Director, Scientific Administration, Merck & Co., Inc. Dept. B-6.

This compound was first used in the Merck Research Laboratories during the original research on cortisone and hydrocortisone. Merck promptly made acid-washed aluminum oxide generally available to scientists and industry, and it has become one of the greatest timesavers in chromatographic operations. Because it does not destroy some of the substances under process, as does non-acid-washed aluminum oxide, it is ideally suited for separating numerous complex organic compounds—notably steroids, alkaloids, and antibiotics.

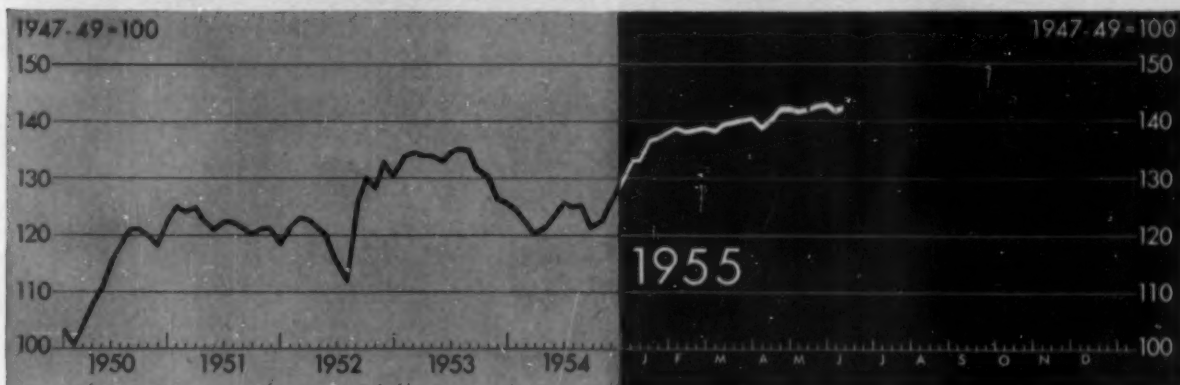
Chromatographic chemicals are only a few of many Merck developments that may give manufacturers in numerous fields the key to establishing more efficient procedures or developing profitable new products.

*Research and Production
for the Nation's Progress*



MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY

FIGURES OF THE WEEK



Business Week Index (above)

| \$ Latest Week | Preceding Week | Month Ago | Year Ago | 1946 Average |
|----------------|----------------|-----------|----------|--------------|
| 142.1 | 142.8 | 142.8 | 125.7 | 91.6 |

PRODUCTION

| | | | | | |
|---|----------|----------|----------|----------|----------|
| Steel ingot production (thousands of tons)..... | 2,330 | 12,286 | 2,338 | 1,725 | 1,281 |
| Production of automobiles and trucks..... | 185,674 | 1163,731 | 221,746 | 139,312 | 62,880 |
| Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)..... | \$62,307 | \$68,731 | \$74,265 | \$49,405 | \$17,083 |
| Electric power output (millions of kilowatt-hours)..... | 10,041 | 9,537 | 9,673 | 8,658 | 4,238 |
| Crude oil and condensate production (daily av., thousands of bbls.)..... | 6,600 | 6,592 | 6,681 | 6,495 | 4,751 |
| Bituminous coal production (daily average, thousands of tons)..... | 1,587 | 11,561 | 1,448 | 1,196 | 1,745 |
| Paperboard production (tons)..... | 282,825 | 263,148 | 274,269 | 256,496 | 167,269 |

TRADE

| | | | | | |
|--|-----|------|-----|------|------|
| Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)..... | 77 | 77 | 74 | 67 | 82 |
| Carloadings: raw materials (daily av., thousands of cars)..... | 55 | 55 | 50 | 47 | 53 |
| Department store sales (change from same week of preceding year)..... | +5% | +10% | +9% | -18% | +30% |
| Business failures (Dun & Bradstreet, number)..... | 230 | 203 | 233 | 206 | 22 |

PRICES

| | | | | | |
|--|---------|---------|---------|---------|---------|
| Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)..... | 404.9 | 399.5 | 401.7 | 432.6 | 311.9 |
| Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)..... | 91.8 | 91.0 | 91.5 | 87.6 | 1173.2 |
| Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100)..... | 87.0 | 86.2 | 86.1 | 99.0 | 1175.4 |
| Print cloth (spot and nearby, yd.)..... | 18.8¢ | 18.8¢ | 18.7¢ | 19.2¢ | 17.5¢ |
| Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100)..... | 144.8 | 144.8 | 144.8 | 140.9 | 1176.4 |
| Scrap steel composite (Iron Age, ton)..... | \$34.00 | \$34.00 | \$34.33 | \$28.08 | \$20.27 |
| Copper (electrolytic, Connecticut Valley, E&MJ, lb.)..... | 36.000¢ | 36.000¢ | 36.000¢ | 30.000¢ | 14.045¢ |
| Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)..... | \$2.41 | \$2.54 | \$2.54 | \$2.29 | \$1.97 |
| Cotton, daily price (middling, ten designated markets, lb.)..... | 33.91¢ | 33.85¢ | 33.98¢ | 34.24¢ | 30.56¢ |
| Wool tops (Boston, lb.)..... | \$1.85 | \$1.90 | \$1.95 | \$2.15 | \$1.51 |

FINANCE

| | | | | | |
|--|----------|----------|----------|--------------|----------|
| 90 stocks, price index (Standard & Poor's)..... | 313.4 | 307.0 | 295.3 | 227.8 | 135.7 |
| Medium grade corporate bond yield (Baa issues, Moody's)..... | 3.51% | 3.50% | 3.50% | 3.49% | 3.05% |
| Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)..... | 2-2 1/8% | 2-2 1/8% | 2-2 1/8% | 1 1/2-1 1/8% | 1-1 1/8% |

BANKING (Millions of dollars)

| | | | | | |
|--|--------|--------|--------|--------|----------|
| Demand deposits adjusted, reporting member banks..... | 56,374 | 56,011 | 56,234 | 54,778 | 1145,820 |
| Total loans and investments, reporting member banks..... | 84,012 | 84,164 | 84,214 | 79,478 | 1171,916 |
| Commercial and agricultural loans, reporting member banks..... | 22,623 | 22,636 | 22,721 | 21,571 | 119,299 |
| U. S. gov't guaranteed obligations held, reporting member banks..... | 32,831 | 33,026 | 33,395 | 33,217 | 1149,879 |
| Total federal reserve credit outstanding..... | 25,044 | 25,001 | 24,924 | 25,802 | 23,883 |

MONTHLY FIGURES OF THE WEEK

| MONTHLY FIGURES OF THE WEEK | | Latest Month | Preceding Month | Year Ago | 1946 Average |
|---|-------|-----------------|--------------------|-------------|-----------------|
| Housing starts (in thousands) | May | 132.0 | 127.0 | 108.5 | 55.9 |
| Wholesale prices (U. S. BLS, 1947-49 = 100) | May | 109.9 | 110.5 | 110.9 | 78.7 |
| Bank debits (in millions) | May | \$167,710 | \$158,289 | \$149,812 | †185,577 |
| Retail sales (seasonally adjusted, in millions) | April | \$15,247 | \$15,060 | \$14,242 | \$8,541 |

* Preliminary, week ended June 11, 1955.
† Revised.

†† Estimate.

‡ Date for "Latest Week" on each series on request.

in BUSINESS this WEEK...

GENERAL BUSINESS:

BUSINESS UNDER THE COST LASH. Looking at the GAW contracts, manufacturers pin hopes to greater efficiency for wriggling out of cost squeezes... p. 25

MORE ALUMINUM. Olin-Mathieson is set to build 60,000-ton plant, but waits for ODM decision on surplus guarantee plan... p. 26

A WORLD POWER AGAIN. Adenauer's leadership has made Germany a vital force in world politics... p. 27

NEW TRAIN. GM will display its low-slung train in

August but is mum on future plans... p. 28

U. S. WIDENS ATOMIC DIPLOMACY... as Eisenhower proposes greater aid to friendly nations in setting up nuclear reactor programs... p. 29

FROM TILL TO TILLER—IN 15 MINUTES. That's the time it takes if you work in Seattle and your hobby is sailing... p. 30

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WASHINGTON RIDES OUT H-DRILL. President and 15,000 officials take flight in civil defense test... p. 70

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SECURITY: THE SETUP DRAWS FIRE. New challenges raised to the scope of the government's authority in security matters... p. 84

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HOW STATES CAN LIMIT GAW. By considering unemployment payouts

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NOW, ASSEMBLY BY MACHINE FOR TV SETS. That's latest—and biggest—step the industry is taking toward fuller automation... p. 58

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NEW SEASON, NEW HOPE FOR DUST BOWL. Recent rains have brought brightest outlook in five years to much of Southwest... p. 94

NEW JOBS FOR REFRIGERATION IN INDUSTRY...



COOLING ACID FOR PRECISION ETCHING

Just one acid solution is used in the Dow-Master Magnesium Etcher instead of the powders and acids of older methods. At Delaware Valley Photo-Engraving Co. Inc., Phila., this method has cut production time for halftone and line engravings considerably. Solution temperature is very important. Delaware reports their Lehigh "Blu-Cold" unit charged with a "Freon" refrigerant holds temperature within $\frac{1}{2}^{\circ}\text{F}.$



KEEPING THE FLAVOR IN CANDY

Temperature control begins at the plant and extends to the retail outlets of Mrs. Snyder's Home Made Candies, Chicago. At the plant, Carrier refrigeration equipment charged with Du Pont "Freon" holds the temperature to $67^{\circ}\text{F}.$ —comfortable for employees, safe for heat-sensitive chocolate. Store temperatures are also carefully regulated. "Freon" is ideal for cooling foodstuffs—it's nonflammable, odorless, nontoxic.



FREEZING BUSHINGS FOR TIGHTER FITS

At Caterpillar Tractor Co., Peoria, Ill., bushings used in track rollers are cold-shrunk to speed assembly—chilled to $-100^{\circ}\text{F}.$ in $6\frac{1}{2}$ minutes. The object of this quick freeze is to enable an operator to slip them easily and quickly into the roller units. Upon warming to room temperature, the bushings expand to form a tight fit which can withstand 25 tons' pressure! Two Webber units charged with "Freon" do the chilling.

*"Freon" is Du Pont's registered trade-mark for its fluorinated hydrocarbon refrigerants.



"Freon" Safe Refrigerants



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY



THIS BOOK SHOWS HOW REFRIGERATION CAN SERVE YOU

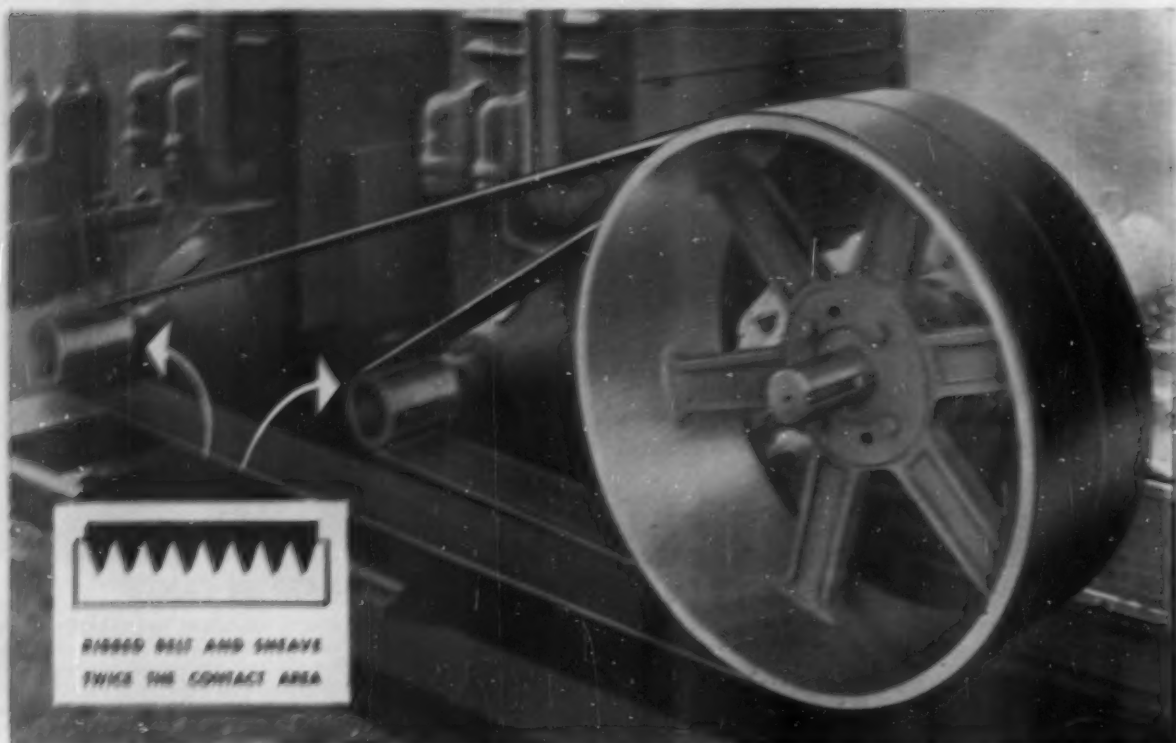
Modern refrigeration and air conditioning may help you solve a production problem, save time, cut costs or improve product quality. You'll find thought-provoking information and suggestions in Du Pont's booklet: "How Air Conditioning and Refrigeration Benefit Industry." Mail this coupon today for your free copy.

You'll also receive information on Du Pont's "Freon" safe refrigerants. These products are nonflammable, nonexplosive and virtually nontoxic, and are used in the vast majority of refrigerating units in service today. Put modern refrigeration—with "Freon" refrigerants—to work for you.

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Nemours Bldg., Wilmington 98, Delaware

Please send me the booklet "How Air Conditioning and Refrigeration Benefit Industry."

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FIRM _____
ADDRESS _____
CITY _____ STATE _____



Compact compounded oilfield slush pump driven by two 180 hp 1600 rpm Diesel engines. Two "M" section Poly-V Belts 12" wide operate over 18" pd engine sheaves and 36" pd pump sheave.

this equipment employs a new concept of power transmission ... the R/M **Poly-V® Drive**

No other belt drive can deliver more power in the same space as the R/M Poly-V Drive installed on this oil field slush pump. Why? Because the unique, patented design of this drive belt gives high V-groove grip and occupies the entire drive width with a continuous strength member of super-strength synthetic cord. Which simply means Poly-V Drive can deliver in many cases up to 50% more power in the same space as ordinary multiple-belt drives . . . or equal power in as little as $\frac{1}{2}$ the space!

And that's only one of the advantages of this newest development by Raybestos-Manhattan engineers. Poly-V eliminates multiple-belt "length matching" problems. The belt fits the sheave like a glove, with total contact, greatly increasing tractive surface . . . twice that of multiple V-belts of the same width . . .

and reducing face pressure and wear. Poly-V sheave grooves do not wear out of shape. Just two cross sections of Poly-V meet every heavy-duty power transmission requirement . . . as compared to five with V-belts. R/M Poly-V Drive cuts costly belt and sheave inventories to a new low!

There are even more advantages of R/M Poly-V Drive that you should have your engineers look into. R/M engineers are prepared to show how this completely new concept in power transmission has proved itself for equipment manufacturers and users in virtually every industry. They'll work with you to determine the installation that will prove best for your requirements. Contact your R/M representative . . . or write for a copy of R/M Poly-V Drive Bulletin #6638.

RD 014



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Business Under the Cost Lash

● Labor costs are going up. Steel will pass the boost along to customers, even if autos can't.

● The pace of the boom also raises demand, cramps supply of raw materials, pushes prices up.

● But competition is hot. Most manufacturers can't raise prices without losing market volume.

● So businessmen are figuring ways to turn painful cost increases into higher production, more efficiency.

"These are the times that try purchasing agents' souls," moaned an order-giver for a Philadelphia ball-bearing manufacturer last week. His lament found echoes throughout the country.

The year of cost inflation is living up to its billing (BW—Jan. 15 '55, p. 27). The Ford and General Motors settlement with the United Auto Workers, which Reuther figured at "more than 20¢ an hour," won't set a pattern in the old fashion—but it is, at least, a target for other union negotiators to shoot at. Pre-Ford wage settlements fell into a 5¢-8¢ range. It seems probable that post-Ford settlements will be hiked to an 11¢-13¢ range.

• **Steel Ahead**—A crucial wage bargain still to be made—and one that may have even more important repercussions than the bargain in autos—is the one in steel. According to informed gossip, the steel workers won't settle for less than 15¢. At the steel industry's ancient ratio of 40¢ extra in price for 1¢ extra in wage costs, a 15¢ hike in steel wages would translate into a \$6-a-ton boost in steel prices.

Steel users throughout the country are already braced for a stiff hike in steel prices after the wage settlement. But \$6 looks like the outer limit. It may be a dollar or so less.

• **Multi-Way Squeeze**—Rising labor costs are only the beginning of the story, however.

The pace of the boom is an even more basic cause of pressure on costs. It is tightening up the labor supply, putting steam behind the bigger wage demands. It is also tightening supplies of some basic raw materials, especially steel, aluminum, copper, and nickel.

Getting long-term contracts at fixed prices, according to most purchasing agents, "is like pulling teeth from birds." Escalator clauses in supply contracts are showing up oftener.

• **But Not Inflation**—But all this pressure on costs resulting from wage hikes, tightness of raw materials, and probable pass-alongs—particularly by steelmakers—won't spell inflation. That's the view of most economists and businessmen.

BUSINESS WEEK reporters talked this week with many manufacturers and purchasing agents. As these businessmen saw it, life would be simpler, at least in the short run, if the economy really was in for a bigger dose of inflation. That would make it easy for manufacturers of consumer items to pass their increased costs along. As it is now, the closer you stand to the man with the ultimate dollar, the tougher it looks to raise your prices.

Businessmen give various reasons for this: throat-cutting among jobbers and distributors; the increasing toughness of foreign competition; consumer resistance.

• **Total Scene**—Economists see a measure of truth in all these explanations, but they try to pull back from the trees and take a look at the forest. As they see the picture, it looks like this:

• **Increases in labor rates** will raise manufacturers' costs more than they'll raise consumer demand. For instance, of the Ford-GM settlement of 20¢, only about 8¢ will actually show up in workers' paychecks; the rest goes into GAW funds, pension funds, etc. Other wage settlements, when fringe benefits are deducted, will be even more modest. As a result of the year's wage settle-

ments, it's unlikely that consumer demand will rise more than about 5%.

• The general money and credit situation is relatively tight. It's probably going to stay that way (page 46). Government monetary policy is to keep the price level steady; the Federal Reserve will aim at increasing the money supply just enough to accommodate real economic growth, not enough to permit much price increase.

• On the supply side, the American economy is demonstrating a fantastic flexibility and expansiveness. This is not simply an economists' dream. Nor is it a painless process. But manufacturers who talked with BUSINESS WEEK reporters this week did not bemoan the pinch of increasing labor and material costs; they said they would "take it and smile." They talked in terms of increasing their volume, running an even more efficient operation, turning out a trickier and more appealing product, using more capital equipment, substituting lower-priced materials for higher-priced ones.

Thus, there's reason to hope that rising costs will spur higher efficiency and production. It's possible that the boost in output can come close to matching the boost in costs.

• **The Record**—To support this hope, there is the performance of the last few years. Since July, 1952, hourly earnings in manufacturing have increased more than 13%, but the cost-of-living index hasn't risen at all.

The stability of the cost of living is, of course, partly due to the long-run decline in agricultural prices. This will probably continue. And that's not the only area where you can find prices softening. Last month, the rent index showed a very slight drop—too slight to mention if it weren't practically the only time it has happened in the memory of postwar man.

Transportation also showed a drop in the last figures, due to the drop in auto prices, which customers have actually been paying to dealers. Apparel prices are softening a bit. In consumer hardgoods, competition is fiercest, overcapacity is greatest.

• **Auto Prices**—Even in the auto industry, where labor lightning struck first, the report is that—regardless of the UAW settlements and the coming

steel settlement—there will be no price increases in autos before fall, if then.

The 1956 models will probably be priced slightly higher, but even that isn't a sure bet. Detroit auto makers are fond of saying, "We build more value into a car at the same price." To some observers this has seemed to mean, "We'd love to raise our prices but we don't dare." Then, too, competition among dealers may be so hot that, even if there's an increase in the price of cars at the factory level, consumers may never know it.

• **Steel Prices**—The big worry everywhere is over the price of steel. Steel is quoted on a "price at the time of shipment" basis. Right now, the books are loaded with orders of some months' standing. If orders are shipped before the price increase goes in—which will be early in July—they'll go at today's price. If they're shipped the day the new price takes effect, the price tags will be switched while the steel is going onto the barges and flat cars.

Steel customers know only too well what they'll do about the coming boost in steel prices: grin and bear it. Steel users have virtually no practical choice of substituting other materials for steel. Theoretically, they could redesign bridges from steel to lumber, or build autos from aluminum or plastic; practically speaking, they can't. Customers will either have to buy steel at current prices or go out of business.

• **Getting Ready**—The way steel's customers are getting set to roll with the punch of rising prices is typified by a small manufacturer in Pittsburgh. He knows the steel price hike is coming—and he knows also that he's going to have to pay about as much more for labor as steel itself does—since he has a United Steel Workers union. He says that, as the smallest of the three producers in his field, he can't boost prices till the price leader does.

As a result, this small manufacturer is trying to steer his outfit into the jobs where he's primarily selling skill. He concentrates on jobs where there's a major content of brains and a minimum content of materials and processing. To make his play, he knows he's going to have to pay his engineers more, but he uses about one engineer to 100 men in the shop.

• **Who Wins?**—As things look now, then, the continuation of cost inflation—which should become more acute in the fall—should benefit (1) wage earners and (2) material suppliers.

Many manufacturers and retailers are going to be caught in a can't-pass-along squeeze. But if they can figure out ways to absorb costs through bigger output, better product, or higher productivity, they'll be able to show a profit—and also be able to pat themselves on the back as public benefactors.

More Aluminum

Olin-Mathieson gets fast write-off on its 60,000-ton plant, but waits for ODM pledge to buy surplus metal.

Prospects for new aluminum production—something that has been bothering both fabricators and the government—brightened up this week.

Olin-Mathieson Chemical Corp. of Baltimore, a \$500-million corporation since the Olin and Mathieson companies merged last July (BW-Jul.10'54, p166), has come back to the Office of Defense Mobilization for assistance in getting into aluminum ingot production.

The company last week applied to ODM for tax amortization and other government assistance in building a primary aluminum plant with a 60,000-ton annual capacity. Before the big merger, Olin Industries, Inc., had proposed to ODM that it build a 110,000-ton plant. This was to be part of the government's so-called third-round expansion of aluminum capacity.

• **Guarantees**—But for several reasons, including the impending merger, Olin never did follow through. Among the reasons was the failure of ODM to provide sufficient guarantees. Olin wanted a guarantee that the government would buy any aluminum Olin couldn't sell privately.

Now the new company has come back to ODM and gotten tax amortization for a five-year write-off on 85% of a \$74-million plant to produce 60,000 tons per year.

So far, Olin hasn't received the additional guarantees it would like. And chances are it won't go ahead until ODM says—one way or another—whether it will give the guarantee on surplus production.

ODM officials this week said such a decision is imminent, but they still weren't sure which way ODM boss Arthur Flemming would jump. If Olin-Mathieson goes ahead, its plant is likely to go somewhere in the West Virginia area where it had intended to locate the earlier plant.

• **Other Entries**—Meanwhile, a brand-new entry in the field is talking about going ahead, perhaps without government aid other than tax amortization. St. Joseph Lead Co. and Pittsburgh Consolidation Coal Co.—both big companies—are also getting a fast tax write-off from ODM on a proposed 66,000-ton, \$85-million plant (BW-Jun.4'55,p34).

Some other people are anxious to get into the aluminum business, and others are bringing new capacity into

production. Harvey Aluminum Co. still wants to start work on its proposed primary aluminum plant, which has also hung fire since the third round expansion program fell through. Harvey would build a 54,000-ton plant, but it has to have government financing of a power line to the site—which isn't in Pres. Eisenhower's budget.

Anaconda Copper Mining Co. gets the first half of its 60,000-ton primary plant into operation later this summer. It will become the fourth producer in this country—Alcoa, Kaiser, and Reynolds being the Big Three. Alcoa is now expanding its production by 65,000 tons, and Reynolds is adding 25,000 tons.

SEC Wants a Hand in Company Proxy Fights

The Securities & Exchange Commission this week supplied some tips on its thinking about rules to deal with corporate proxy fights.

Product of two years of study by the SEC staff, the present line of thinking—still informal and not even in draft stage—points toward tighter SEC control in several important aspects of proxy struggles.

J. Sinclair Armstrong, the new SEC chairman, testified Wednesday before Herbert H. Lehman's Senate Banking & Currency Subcommittee. He took the line that SEC administrative rule changes, not new laws, are needed.

These changes might include:

• **Better definition of the word "solicitation,"** making it clear that all written material by or for a contestant is subject to review. Even annual reports of companies might be included, if issued in connection with a proxy contest.

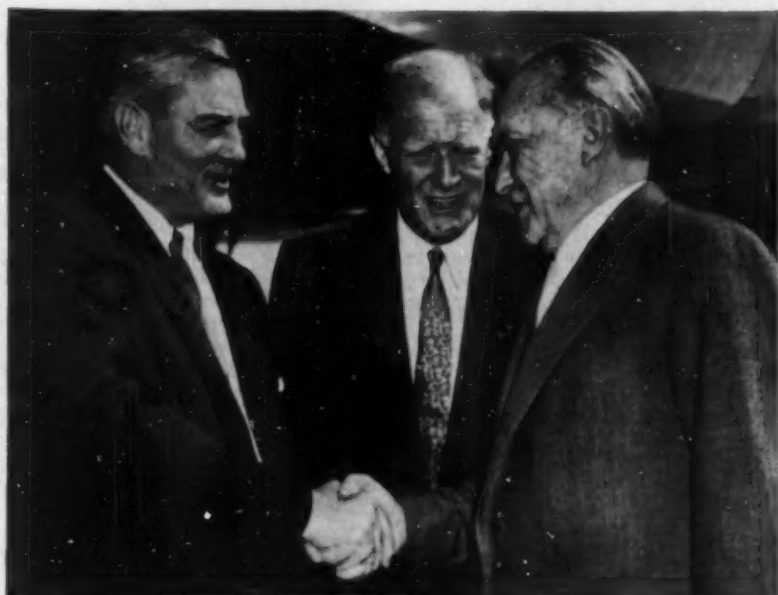
• **Broader definition of "associates"** of contestants.

• **Prohibition of mass solicitation by "outs"**—such as Louis Wolfson in the Montgomery Ward case and Robert R. Young in the New York Central—until SEC has received public statements on all principal contestants and their associates. This would cover identity, experience, stock ownership (number of shares, how owned or financed), corporate connections, and criminal record, if any.

• **Forced disclosure of methods and costs of proxy solicitations.**

• **Full disclosure of author's identity and interests, if any, wherever previously published material is submitted in proxy solicitation.**

• **Preventing brokers and dealers, or their nominees, from executing proxies in contests unless they have specific instructions from beneficial owners of the shares they hold.**



CHANCELLOR Adenauer (right) is welcomed to Washington as Germany emerges . . .

A World Power Again

The stage has been set for a great diplomatic drama—the first peace congress between the free world and the Communist world. With the curtain about to go up, the world suddenly awoke this week to the fact that Germany's Konrad Adenauer (picture) would be one of the leading actors, perhaps even play the key part.

Adenauer has clearly emerged as one of the world's half-dozen leading figures and Germany, though still divided and unarmed, as one of the great powers. It is Adenauer who has prepared Germany for its vital role in the coming drama by founding his foreign policy on two principles that are new to German history:

- Germany, divided or united, must link its future with the Atlantic community—with the U.S. as well as Britain and France.

- Germany must not play East and West against each other as it did in the period from Bismarck to Hitler.

- **New Force**—Adenauer and Germany will not jump immediately to the center of the stage. The 79-year-old Chancellor will be in the wings during the prelude at San Francisco and the first act at Geneva. He won't come on stage until he decides, as he probably will late this summer, to visit Moscow for direct talks with the Kremlin.

But as Adenauer quietly went through his schedule for the past week—intimate talks with Pres. Eisenhower and Secy. of State Dulles, an honorary degree at Harvard, and intensive pre-San Francisco discussions with all three Western foreign ministers—you could feel

the new force in international affairs.

The Western Big Three has become the Western Big Four. Adenauer's voice, in fact, will be second only to Eisenhower's and Eden's in the councils of the West. In any German settlement his views will be decisive. And this problem is so intertwined with the whole question of disarmament and collective security that here, too, Adenauer will play a leading part.

I. Break With the Past

At San Francisco and Geneva the three Western powers that fought Germany in World War II will be representing Adenauer. Then, when Adenauer goes to Moscow, he will be acting for the entire West, not just for Germany. For a German chancellor, that is a new role. Never before has a German leader assumed such a place in the Western world.

- **Strength**—Adenauer's power rests largely on the new direction he has given to German foreign policy. But it is also based on the tremendous economic resurgence West Germany has achieved under his leadership. His entire domestic policy is evidence that as long as he is in office he will stick to his foreign policy through thick and thin. Take his determined opposition to any revival of traditional German militarism, or his endeavors to fit the West German economy into an integrated Western Europe even at the expense of German sovereignty.

Adenauer is confident that he can continue his policies in a unified Ger-

many and build a Second German Republic that will not repeat the domestic and foreign mistakes of the Weimar Republic. His record over the past seven years has pretty well convinced Washington and London, if not Paris, that he can do it.

- **Scrapped**—The fact is that Adenauer has broken completely from the traditional German concept of Germany's "place in the sun," and turned the country from the path that led to militarism. Along with his closest advisers and a growing number of influential men in private life, he has scrapped the old idea that German national interests are best served by playing East and West off against each other. He thinks that such a policy was disastrous in the past and would be again. In the middle position Germany develops the fears and ambitions of an encircled power, which inevitably make it a threat to the peace of Europe.

As Adenauer sees it, there is a world of difference between a Germany standing in the center between two antagonistic coalitions and a Germany standing as an ally on the eastern periphery of the Western alliance. In the latter position Germany will be secure and can develop the arts of peace.

- **Goals**—From the start Adenauer has looked on German membership in the Western alliance as serving two purposes beyond the mere protection of an unarmed West Germany: (1) the short-run goal of achieving German unification; and (2) the long-run goal of keeping a unified Germany both peaceful and democratic. He has consistently refused to seek a solution of Germany's most important national problem—unification—from a narrow national angle. He has held, and still does, that unification can come only as part of an East-West settlement—but one that leaves a unified Germany within the Western community.

What's more, Adenauer has been convinced since 1952 that once the West united and the Atlantic alliance became really strong, the Kremlin would realize that the cold war didn't pay.

II. Road to the Future

Today it looks as if Adenauer has sized up the future pretty accurately. The Russians are negotiating. And apparently they are prepared, specifically, to come to terms on Germany. In fact the one big thing that might come this year out of the peace congress just starting is a Soviet withdrawal from East Germany. Such a development is sure to involve at least a three-phase process of negotiation—the San Francisco-Geneva meetings, the Adenauer visit to Moscow, and a final conference that would include Moscow on

the one side and Washington, London, Paris, and Bonn on the other.

• **Position**—This week Adenauer has been giving first Eisenhower and then Dulles, Macmillan, and Pinay a fill-in on the negotiating position he wants the West to take. It boils down to this:

Bonn isn't prepared to do any horse-trading when it comes to German membership in NATO. It won't even discuss neutrality. But Bonn is quite ready to discuss the German problem in relation to the larger issues of disarmament and collective security. He realizes, too, that the West may have to give Moscow some guarantee against a revival of German militarism by agreeing to a European security system.

It's not clear, though, whether Adenauer would go along with a British idea of offering the Russians a 300-mile-wide demilitarized zone in the Eastern part of a unified Germany in return for a withdrawal of Soviet troops from what is now their zone.

• **Expectation**—Adenauer isn't counting on Geneva to produce an agreement on East Germany. But he is convinced that the Russians now know that East Germany has become a liability. When they are ready for a deal, he is prepared to make one. He is ready to leave to the future the problem of the German territory east of the Oder-Neisse line.

When unification comes and free elections are held in East Germany, Adenauer will be able to chalk up his

great victory over Communism. He expects not only to see the Russians get out but to see the Communist movements in East Germany decimated.

When all-German elections come, Adenauer can count, too, on winning a victory over the Social Democrats. That looked like a dubious proposition two years ago after the East German riots. At that time it seemed as if unification, when it came, would put the Socialists in power—so strong has been their traditional political influence in the eastern part of Germany.

Today it is clear that Socialist strength has been dissipated by neutralism and by the success of the Adenauer policies in both domestic and foreign affairs.

• **Odds**—That doesn't mean that Adenauer, or his successor, will have a cinch rewelding Germany. That will be a tough and costly job. Nor will he have an easy time keeping a unified Germany tied closely to the West. Unification itself will bring a shift in Germany's trade pattern. East German industry, which now sends the bulk of its output eastward, is bound to go on trading heavily with the East. It's likely, too, that many Germans will feel that with unification the nation is again strong enough to play the old "center" game with profit.

Still, the odds are against a reversal of the new direction Adenauer has given to German policy.

New Train

GM's contender will go on trial in August, could bring new philosophy in train making.

Word leaked out a few months ago that General Motors Corp. was building its own version of a low-slung, lightweight passenger train. Almost immediately, several railroads scrambled to be first to place an order. But GM promptly denied the rumors.

Last week, word got out again. This time, it came from GM's Pres. Harlow Curtice, who said that the company is designing and building the train "at the request of railroad officials."

• **Sample Project**—Curtice spelled out the details—capacity, speed, cost—but he confused a lot of railroad people when he said that GM has no intention of going into the railroad passenger car building business. But railroad men guess this means simply that GM has not decided precisely how far it wants to go in the field. So it is building a couple of sample trains. These should be ready in late August. Railroads will look them over and Pennsylvania RR says it has an option on the first one built.

If the railroads' reaction is favorable, then GM's Electro-Motive Div., which builds GM's diesel locomotives, may get into passenger car production. But GM doesn't seem to want to commit itself yet, in case the railroads decide that they prefer some other builder's version of a low-slung train—ACF Industries, Inc.'s Talgo, Pullman-Standard Co.'s Train X, or Budd Co.'s still-unnamed tubular train.

• **Half-Price**—Curtice says the new train will carry 400 passengers at speeds of more than 100 mph. It's patterned after GM's Scenicruiser buses, which Greyhound Corp. put on the highways last year. But what has excited railroad men most is his prediction of the train's cost. Curtice said that when it is in volume production, the train would sell for less than \$1,000 per seat. This is less than half the cost of standard coaches, which are currently priced around \$2,250 per seat.

It is difficult to see how GM could produce a train for the quoted figure unless its own divisions make the components. (The trains designed for August display will have bodies from the Truck & Coach Div., air conditioning from the Frigidaire Div., auxiliary engines for heat and air conditioning from the Diesel Engine Div., and auxiliary generators from the Delco-Remy Div.) If GM were to license outside companies to produce the train from



Tight Fit for Floating Island

With 24 ft. to spare on each side, an 8,000-ton radar "island" squeezes through a highway bridge at Quincy, Mass., on its way to the sea from Bethlehem Steel Corp.'s Fore River shipyard. After being fitted out at Boston,

the structure will be towed 100 mi. off Cape Cod, the supporting legs will be lowered to the ocean floor, and the platform, raised above the waves, will serve as a radar warning outpost (BW-Apr. 16'55,p52).

its own designs, the cost-per-seat price probably would jump.

Furthermore, it is doubtful that such companies as ACF, Budd, and Pullman-Standard would want to produce the GM train, since they have already designed lightweight passenger trains of their own.

• **Time for a Change?**—If railroads should take to the new train, Electro-Motive Div. could bring a new approach to train manufacturing. Nelson C. Dezendorf, Electro-Motive Div.'s head, said this week, "The car building business got into its present position by following a variety of railroad specifications. No two specs are the same. Every railroad has its own ideas."

Instead Dezendorf wants to stick his neck out, discourage railroads from throwing in their own ideas, and adapt some of the mass-production techniques used in diesel locomotive production.

• **New Fields**—If Electro-Motive does move into passenger car production it would be its third step toward diversification since last October. The first was E-M's introduction of a mobile electric power generating plant (BW—Oct. 16 '54, p. 138). The second, announced last week, was production of diesel-electric power units for oil field drilling rigs (page 65).

Because its bread-and-butter business is diesel locomotives, E-M must diversify or stop growing. Railroads simply aren't buying diesel locomotives the way they used to (BW—May 29 '54, p. 52). The reason: Diesels just don't wear out. (The first one ever built for a U.S. railroad is still running.)

E-M wants to keep growing by getting into the related field of passenger car production. So far, GM officials are going slow. But if the railroads like the new train, GM management probably will go along with Dezendorf's plans for E-M.

• **What Railroads Say**—As of this week, railroads seem to be reacting the way that Dezendorf hoped they would. Said one eastern railroad official, "I'll be disappointed if GM doesn't decide to build the cars. The industry needs another competitor." Said Fred G. Gurley, president of Santa Fe Ry., which has test-run a "half-constructed, half-not-constructed" model on its tracks, "We were favorably impressed with the train." But Gurley added that Santa Fe has the train in mind for short runs. Apparently, he is not going to use it to try to compete with airlines for long hauls.

The Pennsylvania says that it has been interested since GM started work on the train, but apparently nobody at Pennsylvania has promised yet to do anything but try the new train when GM is ready to put a model on the railroad's tracks. It won't buy—or reject—the train until after the trial runs.

U.S. Widens Atomic Diplomacy

Eisenhower's new proposal for aiding the nuclear reactor programs of friendly nations is rated as a solid diplomatic success.

Eighteen months ago Pres. Eisenhower became the first practitioner of "atoms for peace" diplomacy when he offered to share U.S. atomic knowhow and nuclear materials for peaceful atomic development with other free nations.

This week, he made two new proposals that will give his atomic diplomacy a lot more punch—and help the U.S. atomic energy equipment industry in the race for world commercial markets.

• **The Proposals**—Eisenhower proposed:

• To put up half the cost of nuclear research reactors for friendly nations and to furnish them the necessary atomic fuel.

• To give friendly nations—either individually or in regional groups—technological assistance to build and operate commercial reactors for producing electric power. That's bound to mean sharing a lot of atomic industrial information still classified secret by the AEC.

It's certain that there'll be plenty of takers for the President's offer of research reactors at half price. Nearly a score of nations already have initialed atomic agreements with the U.S. aimed at the acquisition of such reactors and the information and fuel to run them. Now more are bound to rush to the bargain sale. Officials guess that 50 or more nations will have signed up by year's end.

• **Diplomatic Success**—Eisenhower's offer is rated as a solid diplomatic success. A nuclear reactor—even a professor's model—has a lot of political sex appeal, particularly in the underdeveloped countries. U.S. sharing of atomic knowhow is well advanced; so far, the Russians have only talked about sharing their atomic progress with other countries. The U.S. move is also timed to have maximum impact on the Geneva Big Four talks in July and the atomic conference in August.

The cost to the government of the new research reactor program will be negligible compared to the billions of dollars spent every year for non-radioactive foreign aid. A research reactor can cost up to a couple of million dollars. But present policy limits the amount of fissionable material—U-235 or plutonium—made available to any one country to 6 kg. (13.2 lb.), and this puts a ceiling on reactor size.

In practice, it's expected that the average cost of research reactors under the

program will be around \$300,000, and that few, if any, will cost more than \$500,000. Even at \$500,000 the U.S. government's total bill—for half the cost—would be only \$12.5-million if 50 nations cashed in on the President's offer.

• **Funds Voted**—Congress quickly backed up the President. The Joint Committee on Atomic Energy unanimously voted a \$5-million authorization for research reactors for foreign countries. This probably will be enough to finance the program this year.

U.S. government financing for foreign research reactors means some new business for the budding American atomic equipment industry. No decision has been made yet on whether all countries receiving financial help from Washington to build reactors will be required to buy American equipment. But many of them will do so if their technical assistance and fuel come from the U.S.—even if no strings are attached to the financing.

• **Big Prize**—The big prize in the foreign—as well as the domestic—atomic development field is commercial nuclear power plants. A single plant could cost upwards of \$100-million. International competition already is hot in nuclear power development. Fuel-short Britain currently has a slight lead over the U.S.—which AEC officials insist won't last long.

Thirteen other countries are working to develop nuclear power with varying degrees of vigor, money, and success.

Just how much help the U.S. atomic industry and foreign countries can expect from Washington in the nuclear power field isn't clear from Eisenhower's offer. Its vagueness reflects the tentativeness of official thinking.

• **Problems**—There are a lot of tough security problems involved. Many foreign countries will need a lot of information the AEC is keeping to itself right now. The amount of fuel needed is large compared to that for research reactors—and the U.S. atomic fuel stockpile isn't inexhaustible.

Washington will begin negotiations soon with foreign capitals to try to hammer out agreements that will permit us to work with foreign countries to develop nuclear power and still safeguard basic security interests. Some degree of cooperation is almost certain to result. And U.S. financial aid in developing foreign commercial nuclear power plants is still a possibility.



AT OFFICE Henry Kotkins changes into sailing togs as he winds up day's business.



AT YACHT CLUB he prepares to raise sail on his 38-ft. craft, the Totem.



ON COURSE the wind dies down. Kotkins taps impatiently on the tiller as Mrs. Kotkins—a member of the Totem's crew—searches hopefully for a breeze.

Seattle's Corinthian Yacht Club, located on Lake Washington, is almost within walking distance of the city's business section. That's why so many of the club's 400-odd members are on hand for the 6:30 p.m. Wednesday night races.

From Till

Every Wednesday afternoon—in the early spring and again through the fall—a bunch of Seattle business and professional men jump their office quitting time, and make a beeline for the Corinthian Yacht Club. It's race night, and manufacturers, retailers, bankers, lawyers, doctors are there in full force.



ON WATCH Hunter Simpson of IBM's Seattle office, a Totem crewman, keeps an eye on rivals astern. The Totem's owner, Kotkins, is president of Skyway Luggage Co.



ON THE HOMESTRETCH the Kotkins weigh their chances of winning the race.



AT POST MORTEM in club house, Kotkins realizes where he made his mistake.

to Tiller—in 15 Minutes

Many of them own their own craft. Others consider it a privilege to be working crew members. Some lucky ones go along on the ride as guests. The rest of them are spectators.

Seattle, confined between two bodies of water—Lake Washington on the east and Puget Sound on the west—is a

natural for sailing. Everywhere there's enough water in the U.S., sailing has been a fast-growing sport since World War II. But in Seattle, sailing has become one of the city's major hobbies. The Corinthian Yacht Club, which claims to be the largest exclusively sailing club in the world, was formed in

1945. Today, the club has 410 members and nearly 300 sailboats.

The club runs two series of Wednesday races. The first, on Lake Washington, ended this week. The second, on Puget Sound, gets under way Aug. 3. Each series has six races on consecutive Wednesday evenings. On one night

this year, 131 boats in 14 classes answered the starting gun.

In each event, the course usually is six miles for large boats, four miles for middle-sized boats, and three miles for the little fellows.

The starting gun at 6:30 p.m. gives

contestants little time to get from their work to their boats. Most pick up a sandwich along the way, eat it while they're getting out their boats. Once in a while you'll see a man going aboard in a business suit, with necktie.

Many of the boats are owned by

business or professional men. Boeing Airplane Co. is well represented by engineers who seem to enjoy tinkering with an allied art in aerodynamics. International Business Machines Corp. has five yachts among its men—four of them racing in the series.

Score Two for the Antitrusters

● **Martin, Federal Reserve head, backs Democrats' plans to tighten laws on bank mergers. He says nuptial trend causes "grave concern."**

● **Bethlehem Steel indicates it hopes for government concession before going ahead with tie-up to Youngstown. No quick marriage is in sight.**

The antitrusters were hitting pay dirt this week, as House and Senate subcommittees pushed their antitrust hearings into the hot issues of steel and bank mergers.

On banks, Federal Reserve Board Chmn. William McChesney Martin, Jr. went all out to support Democratic proposals for tightening up the anti-trust laws to deal with bank mergers. Martin said the FRB favors amendment of the Clayton Act anti-merger section to cover asset as well as stock acquisitions by banks and a new requirement of prior approval by the appropriate federal banking agency of any bank merger or consolidation.

On steel, Arthur B. Homer, president of Bethlehem Steel Corp., presented the expansion case for the Bethlehem-Youngstown merger. But—despite talk of the merger coming off over Justice Dept. opposition—Homer indicated that Bethlehem still is looking for some kind of concession from the government before going any further.

I. No Speedy Nuptials

Homer said that Bethlehem has not "reached a decision" whether to go ahead. On the one hand, he said, Bethlehem wants to merge; on the other, his company does not want to get involved in a long court battle if it does. Putting it another way, Homer said, "At the moment, the hurdle is too high to jump. We hope to reduce the height of that hurdle; but so far, we haven't been successful."

The government's antitrusters so far have given no hint of concession to Bethlehem. For almost a year, Justice Dept. spokesmen have been saying instead that a suit to enjoin the merger would be filed as soon as the first formal step is taken by the companies.

• **Hopes Dim**—The outcome, as of midweek, is this: Bethlehem officials are trying their hardest to find a way to make the merger come off, but aren't likely to try it unless they get some assurance of a quick court test that comes to a quick conclusion. And while Justice Dept. is willing to have speedy action, no case of such magnitude lends itself to a quick trial.

Best guess for the time being: no merger.

• **Staunch Support**—This conclusion is reinforced by statements of George McCuskey, vice-president of Youngstown Sheet & Tube Co., who appeared with Homer before Harley Kilgore's Judiciary Subcommittee. McCuskey said that the merger, from Youngstown's point of view, did not "stem from any concern about our ability to survive and prosper as an independent unit." McCuskey made the point that Youngstown not only can "survive alone" but also "expand alone—though not as fast as we'd like to."

This certainly is music to the antitrusters' ears. Barnes has said all along he has no objection to Bethlehem expanding all it wants to, so long as it doesn't include merging with Youngstown. And if Youngstown, smaller of the two, can compete and grow successfully alone, the antitrusters say there is no valid reason for allowing further concentration in the steel industry by combining Youngstown with Bethlehem.

II. Bank Dowries Cut

To back up their views on bank mergers, the antitrusters also heard welcome words from FRB's Martin. Martin, who testified before Rep. Emanuel Celler's (D-N.Y.) Judiciary Subcommittee, in effect gave his support to a new bill introduced by Celler to prevent mergers

through acquisition of bank assets that lessen competition." Antitrust chief Stanley N. Barnes also has plumped for similar legislation to bring banks under the same anti-merger provisions now applicable to other types of businesses.

Martin told the Celler committee that bank mergers, consolidations, and absorptions went on at a rate of 81 in the first four months of 1955, and may total 240 for the year. This is in line with a trend, Martin said, with 100 recorded in 1952—the largest number since 1939—116 in 1953, and 207 in 1954.

Martin indicated that, while there are many reasons why banks have decided to merge or consolidate in recent years, the trend is giving FRB's board of governors "grave concern."

Martin pointed out that the present Clayton Act provision dealing with banks "is of little significance." The law bans stock acquisitions—but not asset acquisitions—where banks are concerned. Yet, says Martin, national banks and state banks that belong to the Federal Reserve System are prohibited from buying corporate stocks, and many states prohibit stock purchases by state banks.

Martin did suggest, however, that the new authority against acquisition of bank assets be enforced by the Attorney General—not FRB. He cited the only proceeding ever initiated by FRB under the Clayton Act—against Transamerica Corp.—which the courts threw out rather readily.

• **Approval**—Martin's other major proposal—requiring advance approval of all bank mergers or consolidations by federal banking agencies—received sympathetic hearing from both Democrats and Republicans on the committee, too. This would require amendment either of the Federal Deposit Insurance Act or the Clayton Act.

Whatever slight differences there may still be between the views of FRB and Celler apparently will be worked out in the conferences. Martin agreed to sit down with Celler's staff to iron out a few points, so that Celler may soon have a well-drafted, technical version to present to Congress that has important support in the Eisenhower Administration.



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BUSINESS BRIEFS

Chairman Ridgway: The Mellon Institute of Industrial Research has named Gen. Matthew B. Ridgway to head its board of trustees after the Army Chief of Staff retires this month. The naming of Ridgway is part of the Pittsburgh outfit's plans for expansion, and the separation of its administrative from its scientific functions.

Utilities betrothal was announced when a merger was approved by the boards of Seattle Gas Co. and Washington Gas & Electric Co. Stockholders will vote late next month on the proposal. Both companies operate in the Puget Sound basin.

The first polio suit arising from the use of Cutter Laboratories vaccine has been filed in California. The parents of a boy who was stricken with polio a week after being inoculated with Cutter-produced vaccine have sued the lab and the drugstore that sold the vaccine for \$100,000. They charge gross negligence.

Economic indicators from here and there: F. W. Dodge Corp. reports that May contract awards for home building dropped 6% below April in the 37 eastern states. But actual building in the U.S. continued briskly in May, with new construction valued at \$3.5-billion being put in place, according to government figures. The seasonal gain reached a point 13% above a year ago. . . . Telephones also blossomed, says Mother Bell, with 53.6-million in use at the end of March, a gain of 2.7-million-plus in a year.

The props under wheat have been lowered to their post-1946 nadir by Agriculture Secy. Benson. Government support for 1956 has been set at 76% of parity (\$1.81 per bu.); this year the figure was 82½%.

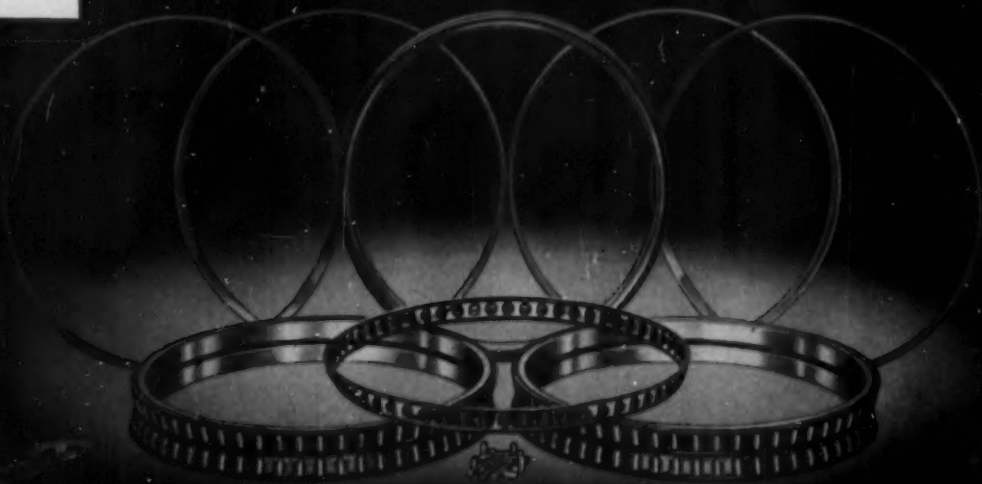
N. Y. Central plum: The Interstate Commerce Commission has O.K.'d the deal by which Pres. Alfred E. Perlman of the Robert R. Young-controlled railroad can buy 32,000 shares of Central stock at \$19.87½. Lately, the stock has been selling around \$45.

Lockheed-Bell merger was rumored this week, with both companies admitting the possibility, but stressing there was "nothing more imminent now . . . than any time in the past." Insiders say the marriage would be a natural: Lockheed makes transport planes and fighters, Bell specializes in research aircraft, helicopters, and guided missiles.



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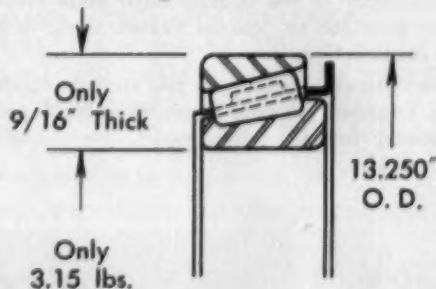
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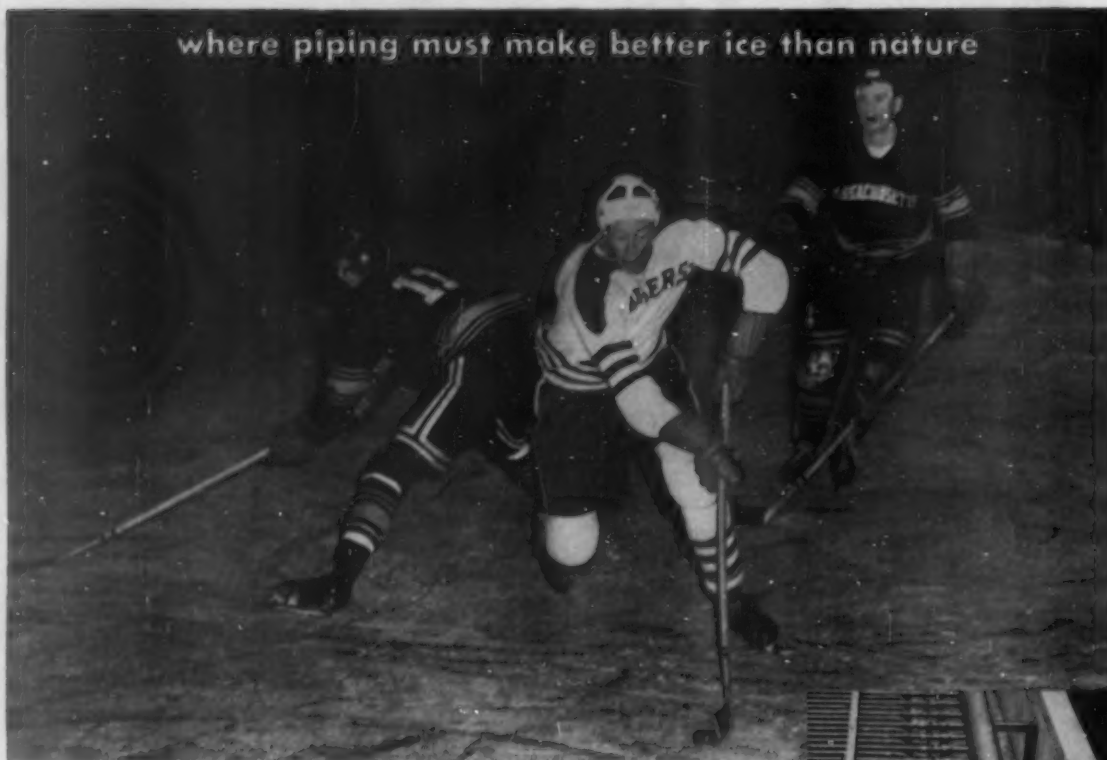
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Modern skating rinks at sports arenas, colleges, schools, and clubs provide a hard, flawless surface on demand. Making better ice than nature requires critical valve control of hundreds of separate loops under the ice.

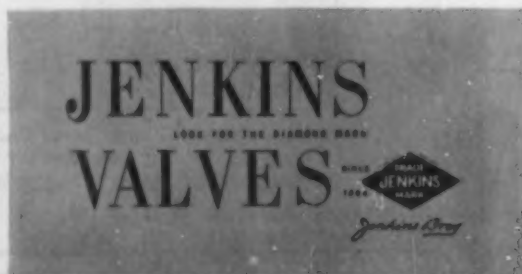
Arrested flow of the brine in even one loop could cause a dangerous "soft" channel across the surface. At any one of hundreds of critical points, faulty valve operation could easily shut down an entire rink.

Jarvis Engineering Co. of Boston, who built the Harvard, Amherst, St. Paul's, and many other fine rinks, have chosen Jenkins Valves for over 80 miles of piping involved. They know that the only true economy is to install the best valves that money can buy. Other rink specialists share their confidence in the demonstrated *extra measure* of efficiency and economy provided by Jenkins Valves, along with the leaders in every field of construction.

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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JUNE 18, 1955



Watch Congress during the next six weeks. That is when you will get the major legislative decisions affecting business. The push to adjourn is starting and the leaders plan to wind up the session in another six weeks or so. Already, you can anticipate some of the major effects. For instance:

Spending will be high in the next 12 months—fiscal 1956, starting July 1. It will run close to the budgeted \$62.4-billion.

No economy ax is being swung. In fact, there's little real effort to cut the budget. Changes from original Eisenhower recommendations are on the up-side. Example: \$356-million more for Air Force B-52s. And more money, too, to push arms research and development.

And the stage is being set for a rise in public works spending—roads. The highway issue has turned into a hot squabble between the White House and Congress. The end result, however, will be a large jump in spending, no matter which side wins out.

Tax cut prospects for next year are involved in pending decisions.

Pres. Eisenhower's support for reductions is no certainty. Close advisers say the President wasn't shooting from the hip when he told a recent press conference a balanced budget must come first. What he has in mind is the possible budget impact of Russian air gains, plus the maneuvering by the Democrats to substitute their highway plan for his. His feeling then and now is that tax cuts in 1956 might mean continued big deficits.

Here's how highways fit into the budget and politics:

Eisenhower's program aims at \$100-billion spent on roads in the next 10 years. State and local governments would carry close to \$75-billion. Washington's share would be some \$25-billion—four times present rates. But the extra wouldn't be fully charged against the budget as it was spent. A Federal Highway Corp. would issue bonds outside the federal debt limit; the annual budget charge would be only for bond retirement.

The program of the Democrats is comparable in size. The big difference is on the financing. They want the budget to reflect road spending fully; this would dim Eisenhower's chances of showing a budget balance.

The political play is this: Democrats plan to drive through a tax cut next year ahead of the general election. If they can put Eisenhower in a position where he feels he must oppose, then they figure they can get an advantage. So, the highway showdown will be a no-holds-barred deal.

Other legislation important to business can now be ticked off:

Companies with defense contracts should figure that renegotiation will be continued for at least another year.

A new ruling on renegotiation exemptions is coming. A list of the "standard commercial articles" that the Renegotiation Board considers outside the law will be issued once legislation is completed.

The atomic equipment industry will get orders via the Eisenhower plans to help friendly countries develop peacetime uses of atom energy (page 29). Congress will O.K. this project. It will put U.S. producers of this type of equipment in the race for foreign markets.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
JUNE 10, 1955

The atom-powered peace ship is a dead dove. Eisenhower asked for it as a propaganda tool to be used in the cold war. But Congress' idea is that the money should be spent to power a commercial vessel. This ship will be authorized, but will be two to three years in the building.

New anti-merger legislation has no chance this session. The hearings going on in Congress are stage-setting for next year.

Here's what to expect when the tightening does come: (1) supervision of bank mergers and (2) a requirement that all merging companies file advance notification with Washington.

Foreign aid will be voted along Eisenhower's recommendations. The total will be close to the White House's \$3.4-billion.

Tariff cutting will be slow under the trade agreements extension, which Eisenhower won with the help of House and Senate Democrats.

Customs simplification bill still faces an uphill fight. Odds are against passage this year, although action is still a possibility.

Controls over war materials will be voted—the Defense Production Act extension that the White House wants.

Stand-by wage and price controls are out. The Administration would like to have them, just in case. But it won't make a fight.

Less federal control of natural gas prices has a pretty good chance.

Tax depletion allowances for natural resource industries will stand as is this year. But note that Congress, through its Joint Economic Committee, is getting ready for changes next year.

Eisenhower sees his military reserve bill as a must. The House was ready to pass it, until the amendment outlawing segregation in reserve units, including the National Guard, was voted. It then shelved the bill.

Senate Democrats could have helped on this one, but they refused. The plan was to tie the reserve bill to the draft act extension, which must be voted by June 30. Idea was that the House would go along, rather than see the draft expire. But the Senate Democratic leadership said "no."

The politics are clear. Eisenhower's plans for cuts in military manpower were based on building up the reserve strength. If he goes ahead without his reserve bill, he will be accused of weakening defense.

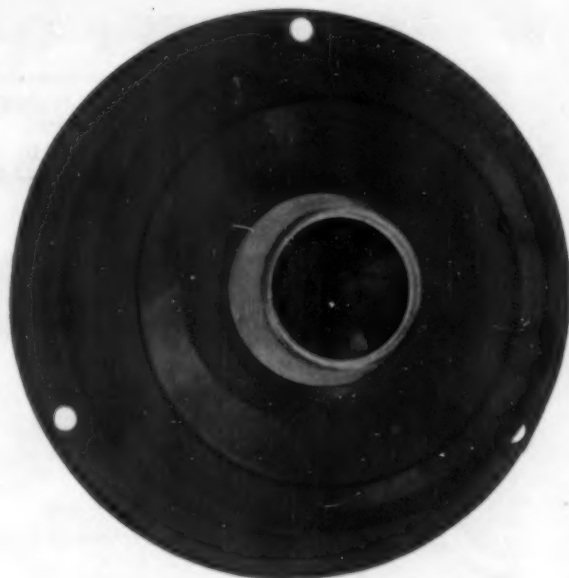
Segregation has the school construction aid bill stopped. Prospects are that it will get nowhere this year.

Public housing may get snarled, too, on the same issue. The Senate enlarged Eisenhower's program. But the whole thing may get tied up in the House over the racial issue.

Eisenhower won't force a showdown now on issues in dispute with Congress. He will push and prod, using his press conference. He may even go on the radio and TV. But he wants no open split ahead of the Big Four talks. Dissension here at home could weaken his bargaining position abroad.



Freezer Door Panel



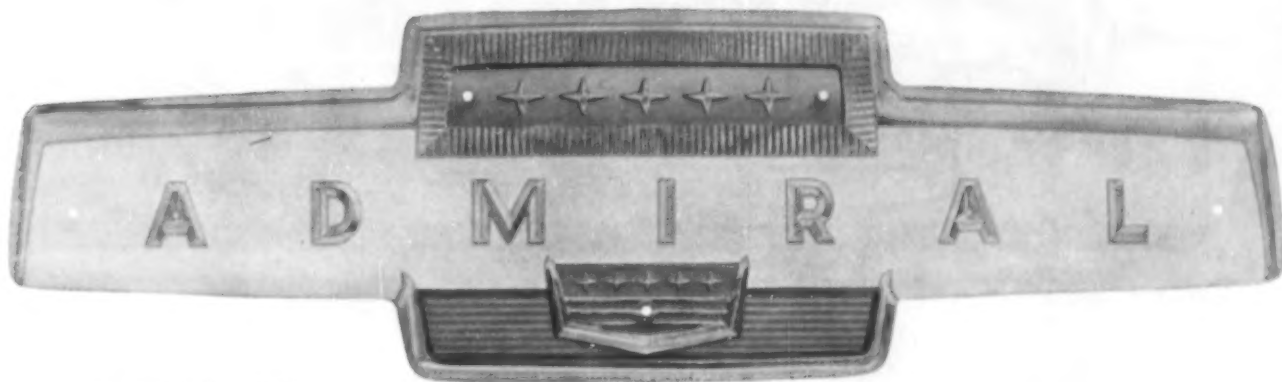
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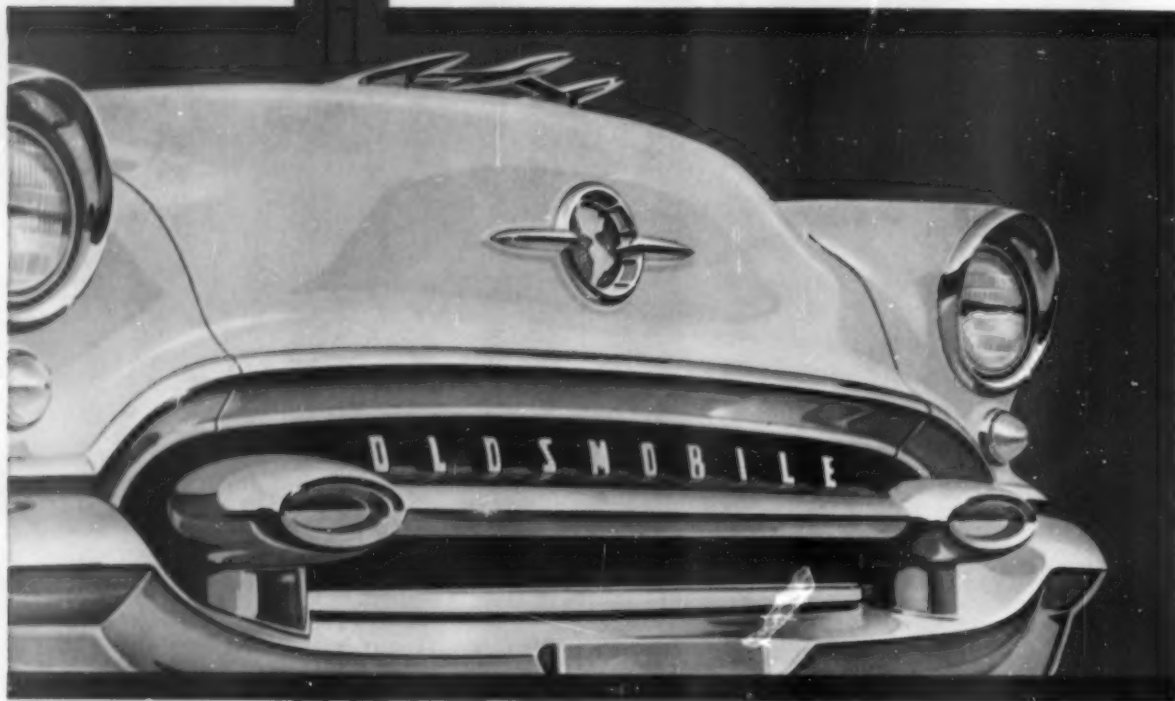
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1. Doe owns 100 shares of ABC Corp., has a 10-point paper profit and—with the market shaky—would like to sell. But he has held stock only three months, would have to pay full income tax on profit.



2. He buys a put option, allowing him to sell the shares near the present market price at any time within the next six months. This protects his profit until it comes under the lower capital gains tax.

3. If the stock takes a nosedive, Doe can still sell at the price specified in the option. If the stock moves up sharply, he can let the option lapse (losing only its cost) and sell at the higher price.

... Puts



1. Jones has a hunch that the stock of XYZ Corp. might move up. He doesn't want to sink a lot of money into it now, in an uncertain market, but might buy XYZ at the present price if the market held up.



2. To keep a hook in the stock without buying outright, Jones buys a call option for around \$500. This allows him to buy, at any time within three months, 100 shares of XYZ at \$50—slightly above present market price.

3. If XYZ goes up much over \$55, Doe makes a profit — after deducting cost of option. If XYZ stays where it is or slumps, he lets option lapse, and can deduct his \$500 loss (the cost of option) from income tax.

... and Calls

©BUSINESS WEEK

Hedges Against Market Vagaries

When a bull market has aged and the future is uncertain, you begin to hear the restless rustlings of stock certificates. Investors, like the fictional characters above, start looking around for ways to (1) keep their paper profits from evaporating if the market should nosedive, and (2) avoid selling out just before the market moves up again.

Stockholders in this frame of mind are one source of business for Wall Street's two dozen or so brokers in the options known as puts and calls. But there are as many different reasons for buying put and call options as there are for buying stock outright. In the official language of put and call brokers themselves, the greatest use of options

is to protect paper profits, "or to assume a position in stocks with a known maximum risk."

• **Historic**—Puts and calls have a history back to around 1694, when John Houghton wrote a description of the use of options in London securities dealings long before the London Stock Exchange was established. They are

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used much more widely in Europe than in this country. Over here, they hit their peak in the free-wheeling days of John W. ("Bet a Million") Gates. Big-time speculators like Gates used puts and calls to pump up profits on incredibly slim investments of hard cash.

Today, put and call options are running well ahead of, say, two years ago. The Put and Call Brokers & Dealers Assn., Inc., doesn't make public its weekly trading figures, but volume of options has probably doubled over the last couple of years. It now totals around 1.5% of trading on the New York Stock Exchange.

• **Not Well Known**—One reason the options ordinarily don't run to large volume is that not many stock buyers—or, as some put and call dealers claim, investment advisers—understand them. And, with ordinary bull market profits swelling pocketbooks, many investors see no need to get involved in options.

Since the bull market started slowing down, however, traders and investors have been turning to them, with an eye to their insurance qualities.

• **Bar Sinister**—Perhaps even more important than the lack of understanding of stock options is their long-standing link with speculation. Even today, it is generally granted that the in-and-out traders are probably the biggest users of puts and calls, but the options are also bought and sold by many conservative investors. Still, the reputation of the put and call market as an adjunct to speculative activity has been hard to shake off.

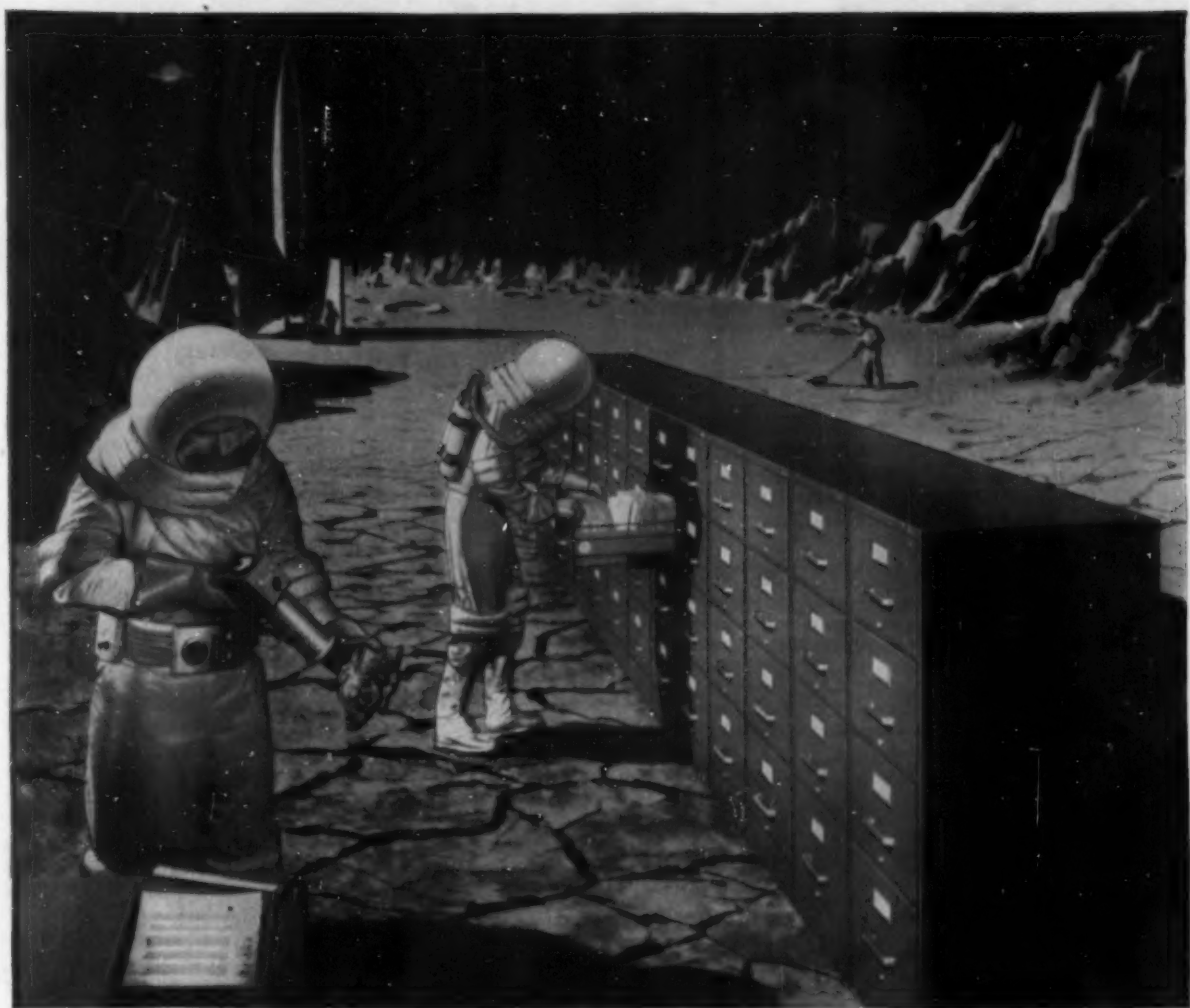
"It stems," says one experienced Streeter, "from the more sordid days in the 1920s when a lot of shoestring speculators could get a broker to finance them at as little as 1% margin, providing they had a put and a call on the stock."

This same observer feels the reputation of puts and calls is unwarranted. "There aren't a handful of people who know puts and calls that are at all wary of them."

Still the speculative stigma persists, and the strength of it is perhaps best reflected by the fact that one of Wall Street's largest brokerage firms doesn't "as a general rule" endorse put and call options. "If a customer wants to sell a call, now and then we'll do it for him," says a spokesman, "but we try to avoid it. . . . We try to associate our name with the investment side of the market, not the speculative side."

• **More Doing in Calls**—In today's bull market, call options—that is, options to buy stock at a given price within a stated span of time—are getting the big play, despite investors' nervousness. The latest upward kick should reinforce this tendency.

The holder of a call has an option to buy a certain stock in 100-share lots



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for a price, either at the present market or slightly higher. The call option is endorsed by a New York Stock Exchange member, who guarantees completion of the contract, and it is negotiable. It can be exercised anytime within its life, usually 30 days to a year. Put and call dealers have been trying to discourage use of the short-term 30-day contracts. They stress the capital gains attractions of the contract for 6 months and 10 days.

The cost of a call, paid to the owner of the stock, is largely determined by three factors: market conditions at time of purchase, length of time the option runs, and how far the price is set above the market. The longer the option runs and the lower the call price is under present market price, the more expensive the operation will be.

Unlike put options, calls are taxable. The maximum tax on a call is \$10 per round lot.

• **Using a Call**—Ordinarily, the call option is used the way the character in the drawing on page 41 is using one—to establish a long position in a stock at known risk without a heavy initial investment of capital. But you can use calls just as easily in protecting an already established short position.

For instance, let's say you sell 100 shares of Wow Mfg. short at \$70 a share. You then buy a call exercisable at \$70 or slightly above anytime within three months, for around \$375 plus tax. If the market price of the stock gets down below \$65, you can buy the stock in the market, let your call expire unexercised, and still make a profit. The size of your profit will depend on how far the stock goes below \$65—which is about the break-even point, figuring in the cost of the option, taxes, and commissions.

If your hunch that the stock will go down turns out to be sour, and the stock instead zooms, you still have the option to buy it at \$70 a share to cover your short position.

• **Using a Put**—The put works pretty much the same way as a call except that, as it is an option to sell, no taxes are involved. The price of a put is affected by the same conditions as a call. The farther below market the option price is, the less expensive the option will be.

Put and call brokers claim that puts are far superior in limiting market losses to the stop-loss order—an order to sell at the market when the price drops to a specified level. The trouble with a stop-loss order, they point out, is that often you don't get precisely the price stated on the stop-loss order; by the time your broker can carry out the sell order, a fast-moving market may have dragged the price still lower.

A put allows you to sell 100 shares of the stock at a stated price, usually

at the market or a little below it, for a given period. If the market goes up, the put would go unexercised, and you would have bought some expensive insurance for that period. If the stock declines in price, no matter how low it may sink, you can exercise your option at any time at the price of the contract.

You can also use a put option in lieu of a short sale. It works like this: You buy a put for, say, \$50 when the stock is selling at \$52. Should the price of the stock decline to \$44, you buy the stock at the market, then exercise your put. If the stock never goes below \$50, you won't elect to exercise the put, but at least you can write off its cost on your income tax as a short-term capital loss if held for less than six months, long-term if held longer than that.

• **Straddles and Spreads**—Perhaps the most fascinating facets of the put and call market are the high-powered gimmicks known as straddles and spreads. These are basically combinations of a put and call, with a straddle consisting of a put and a call for the same stock, at the same price (usually current market) for the same length of time. A spread is also a combination of a put and a call, but the put is priced slightly below the market, the call slightly above.

In a wildly fluctuating market, a sharp-eyed tape-reading trader might make a king-sized killing using spreads or straddles. However, these gimmicks cost around twice the price of a regular put or call, thus increasing your losses if you couldn't exercise either the put or the call at a profit.

• **Game for Men**—When buying put and call options, there's one thing to keep in mind, experienced Streeters warn. The people who write put and call options—that is, those who buy your stock when you exercise a put, or sell it when you exercise a call—are experienced long-term investors with plenty of money and market savvy. The source of most of the stock involved in put and call trading is the investment trust, the college endowment fund, the life insurance company, and the wealthy individual.

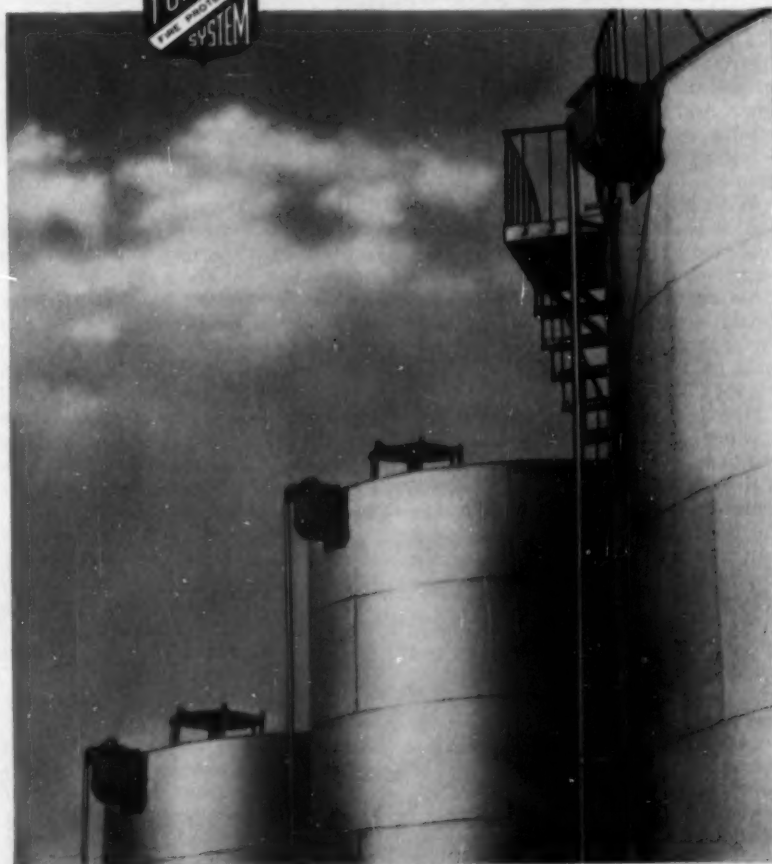
These conservative investors write options only when they expect to make a profit. They are in and out of the market anyway in the course of shuffling their portfolios, and they are usually willing to sell a given stock slightly above present market price, or to buy more at slightly less than market quotations. For them, writing of options has proved profitable in the long run; when options are allowed to lapse, as many are, they have the price of the options as a gain. Through prudent handling, they keep losses far below profits.

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Dilemma for Money Managers

● The Federal Reserve is up against fresh demands for credit, both seasonal from business and periodic from the Treasury.

● The Treasury has been stretching short-term debt into long-term bonds. This cuts the volume of bills available for the Fed's open-market operations.

● So, to ease credit, the Fed may have to cut bank reserve requirements. That would be a policy reversal.

Two rumors—on their face completely contradictory—were buzzing through Wall Street this week:

- The Federal Reserve System was going to cut the reserve requirements for member banks—a dramatic step toward easier credit that would, in effect, reverse the policy the Fed has been following this year.

- The Fed was going to raise margin requirements for stock purchases—an obvious slap at credit speculation.

The funny thing is that both rumors might be right. For the Federal Reserve finds itself in a peculiar spot just now. And it may have to do some peculiar things to get out of it.

- **Nature of the Spot**—The Fed's dilemma is this:

With an eye on the threat of inflation, it has been following a policy of mild credit restraint ever since business began to boom. As a part of this policy, it has decided that the money markets should be allowed to tighten up naturally as the increasing demand for credit soaks up available funds (BW—May28 '55,p41).

However, the market faces the huge upswing in demand for credit that traditionally comes in the second half of the year. And on top of this seasonal demand from business, the Treasury will be asking the market to supply it with almost \$10-billion to cover the government's cash needs between now and December.

The squeeze is due to begin almost at once. Banks will need extra reserves temporarily to take care of the big withdrawals of currency over the July 4 weekend. Immediately after that, the Treasury intends to hit the market for something like a \$4-billion to \$5-billion loan.

- **What to Do?**—The Fed can't stick to a hands-off policy in the face of demands like this. If it did, it would acutely embarrass its sister agency, the Treasury. And it would put a painful squeeze on business, a squeeze that might have a suffocating effect on

healthy demands for credit as well as on speculative demands.

But the question is how the Fed can ease this prospective squeeze without encouraging precisely the kind of speculation it has been trying to shut off.

- **Treasury Factor**—The Fed's problems are complicated by a purely technical but nonetheless irksome difficulty.

Ordinarily when it faced a problem such as this—a problem that involves a delicate adjustment of the supply of credit to the demand on practically a day-to-day basis—it would run the level of bank reserves up and down by buying and selling Treasury bills—the government's shortest-term paper—in the open market.

But the Treasury, determined to lengthen the average maturity of its debt, has cut the total amount of bills outstanding by about \$2.5-billion below the level of last May. It has stuck to this lower total in spite of the fact that the non-bank demand for bills (which most corporations regard as an interest-bearing substitute for cash) has been rising. As a result, there aren't regularly enough bills available for sale to make a real market, let alone to use as a precision instrument for regulating credit.

In this spot, the Fed cannot expect to feed more reserves into the banking system by purchasing bills from its members. Last week, commercial banks held only a bare \$1-billion in bills, which is close to what they consider the irreducible minimum.

- **Narrow Choice**—This leaves the money managers with a hard choice. They can either fumble around with open market operations in an assortment of government securities, never knowing precisely what effect any given purchase or sale will have on the money market. Or they can loosen up the whole credit situation by cutting bank reserve requirements.

The trouble with cutting reserve requirements is that it would broaden the

credit base more than the Fed wants to. And it would give additional reserves not only to the banks that need them but also to the banks that have no healthy outlets for them in sight.

- **Prospect**—The Fed, with its customary buttoned lip, will give no hint of beating so obvious a retreat from its previous mildly restrictive credit policy. It says that it expects "to squeeze through" the coming period of difficulty somehow. Plainly, it hopes that the Treasury will help get it off the spot, by forgetting about lengthening the debt and by issuing a batch of bills in a hurry.

The Treasury, on its part, refuses to give up its dream of stretching out the debt. Plainly, it hopes that the Fed will be a good fellow and loosen credit enough to let it have its way. Although no one in the Treasury will say so out loud, it may even be hoping that an across-the-board reduction in reserve requirements would set the market up for the issue of another long-term bond. If so, that would indeed be a red-letter day in Secy. George Humphrey's calendar.

As a lot of smart Wall Streeters see it, somebody or something will have to give. Either the Treasury will have to content itself with short-term issues, to raise its new money—including an immediate increase in its bill offerings, or the Fed will have to loosen up the reserve situation by cutting requirements. The notion that somehow the monetary authorities can "squeeze through" sounds too much like wishful thinking to these observers.

- **Offsetting Action**—If the Fed should cut reserve requirements, it might try to take some of the inflationary kick out of this move by making a simultaneous deflationary gesture—raising margin requirements. This would have no direct effect on the supply of credit, but it would put Wall Street on notice that the Fed was not prepared to put up with any speculative foolishness.

However, Fed officials don't have much hope that any offsetting action would prevent excessive expansion. They feel that business is already infected with an inflationary psychology. The wage settlements in Detroit, and the one expected in the steel industry, are adding to this inflationary pressure. Even a one-point reduction in reserve requirements, would mean a potential expansion of almost \$6-billion in bank deposits, and would inevitably encourage inflationary tendencies.

Many money market experts think that if the Fed has to take the plunge, it will be telling evidence that its control over credit policy has once more

been subordinated to the demands of the Treasury. In many ways, the Reserve Board would be back in the same unhappy corner it occupied before the Fed-Treasury accord of March, 1951.

FINANCE BRIEFS

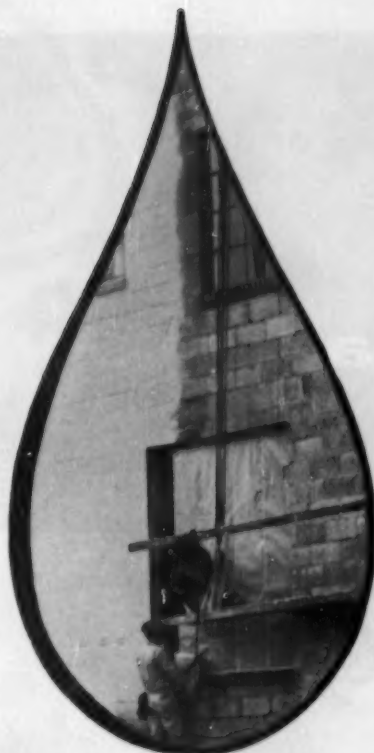
Income tax payers made mistakes totaling \$95.7-million in their 1954 tax forms, according to Commerce Clearing House. About 80% of the errors were in the taxpayers' own favor, said CCH. Nearly \$70-billion was collected in 1954, with 89-million returns filed. Perhaps the biggest statistical eyebrow-lifter: There were 4,555 claims for rewards by tax informers last year, more than twice the number in 1953. Slightly more than 10% of the claims were allowed.

The tax-exempt market will get a couple of big issues in July. A New York State Thruway issue totaling \$125-million is scheduled for July 12. Eight days later, the Public Housing Administration will sponsor an issue of local housing authority bonds totaling between \$110-million and \$135-million.

Trees on the cuff: New England bankers should stop regarding that area's forests as "frozen assets" now that an amendment to the Federal Reserve Act permits bankers to accept standing timber as collateral for first mortgage loans. This was the crux of a speech by Ansgar R. Berge, assistant vice-president of the Federal Reserve Bank of Boston, who urged bankers to finance New England timber owners.

Western Union Telegraph Co. has asked the New York State Public Service Commission to permit it to issue \$38.5-million of 4½%, 25-year debentures. Western Union would like to refund two outstanding issues carrying higher coupons through private sale of the proposed debentures to 50 institutions.

Servel, Inc., will probably take a "planned loss" of around \$4-million in its fiscal year ending next October, according to president Duncan C. Menzies. In the first six months, sales are off over 57%, with hefty inventories of air conditioning equipment and a heavy slash in defense business the biggest trouble spots. Menzies added that sales were also cut back by the company's refusal to "make shipments to delinquent accounts except on a current basis." As of last April, 61% of Servel's accounts were current, Menzies said.



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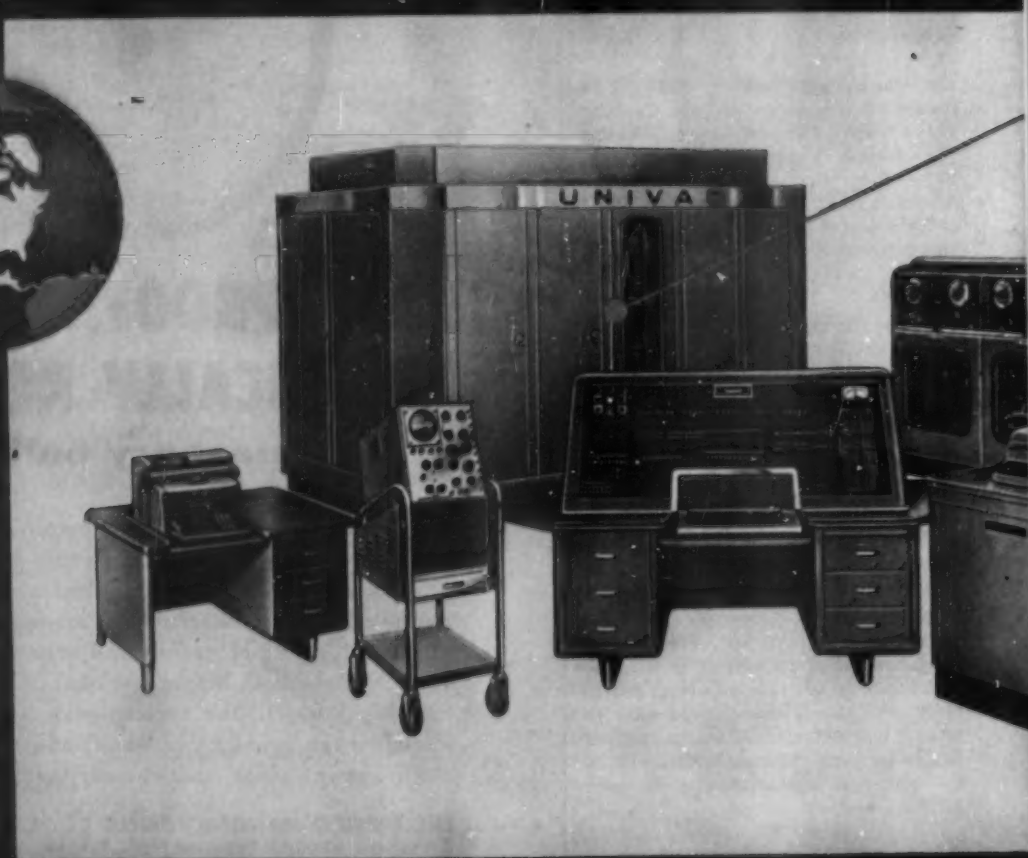
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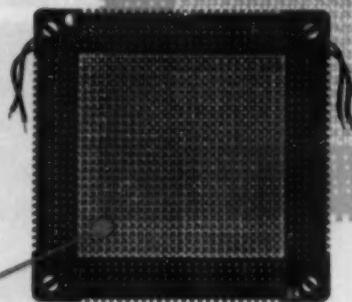
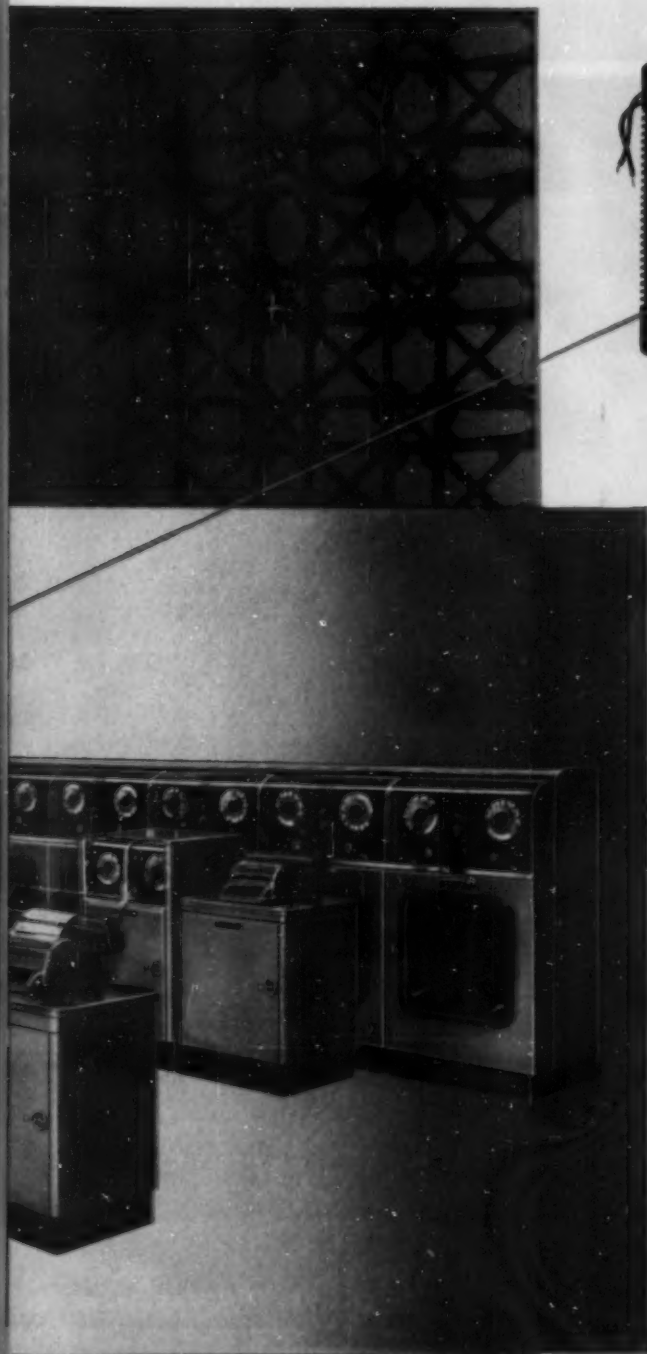
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It's the new Univac II — finest business computing system ever developed. The famous Univac of Remington Rand is still the *only* completely self-checking system . . . the only one which can read, write, and compute simultaneously. And now Univac adds to these superior features the speed of a magnetic-core memory.

Remington Rand has pioneered in this important new development, installing, a year ago, the first commercially available electronic computer to use magnetic-core storage successfully.

Mnemonics, says Webster, is "the art of improving the efficiency of the memory." And, as far as electronic computing is concerned, the new Univac II carries this art to a point far beyond its contemporaries.

With this new magnetic-core storage, the internal memory of the Univac has been doubled, giving instantaneous access to 24,000 alphabetic or numeric characters. If needed, capacity can be further increased to 120,000 characters.

Univac's external memory — magnetic tape — now has greater capacity, too, increasing input and output to a peak speed of 20,000 characters per second . . . the equivalent of reading or writing every character on these two pages more than 1,000 times a minute.

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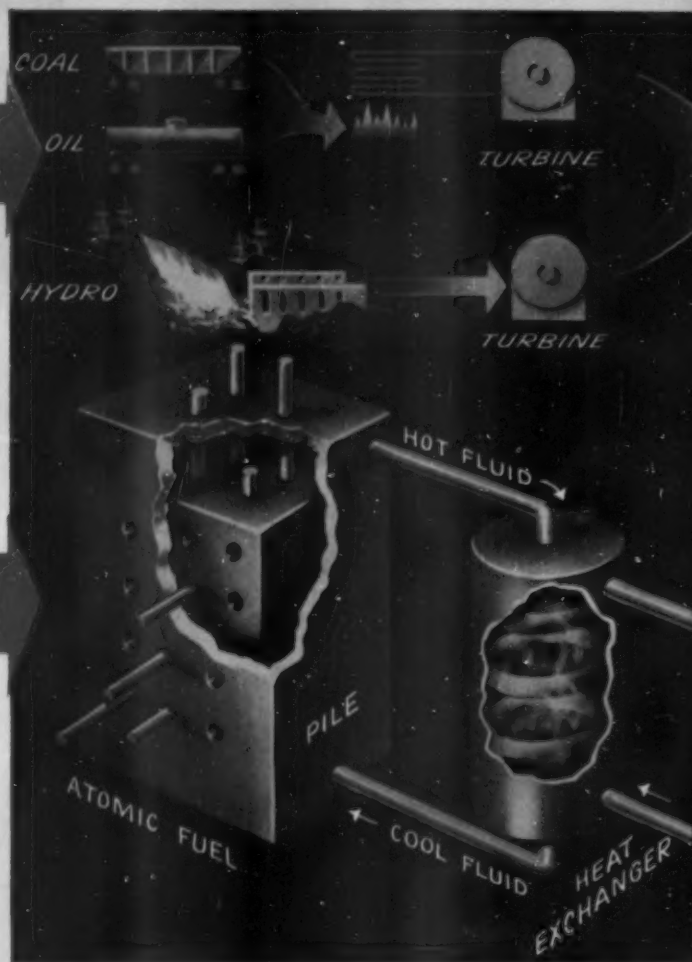


PRODUCTION

1. Today's sources of power for generating electricity are these:

3. Tomorrow's nuclear power plant basically will operate like this:

Here are four types of reactors that look good now.



1. Pressurized water flows through the reactor, picks up heat from the fission of fuels. High pressure keeps that water from boiling. The heat passes through an exchanger, makes steam from other water. The steam drives a turbine-generator.

2. A homogeneous reactor has a continuous fuel system, instead of one arranged in lumps in the reactor. A solution of a fuel and a liquid also carries heat to steam generators, much like the pressurized water method.

Nuclear Power Reactor: How the

The modern nuclear reactor, shown in the illustration above, has come of age from a technological standpoint. It is now possible for an electric utility with enough money and managerial courage to have a nuclear-fueled power station built with almost as much ease as to have a conventional thermal or hydroelectric plant constructed.

Most utilities, for years to come at least, will find conventional power sources more economical. But the time has come when atomic power has to be considered as one of the possibilities in building any new power plant.

• **Big Role**—The electric industry fully realizes the big role nuclear-fueled power plants will play in meeting the

tremendous growth in the demand for electricity that is expected to develop in the years ahead. And for this reason the utilities, equipment manufacturers, and engineering-designing firms have been hard at work trying to make reactors feasible for power station use.

The result is that a utility today can shop around among manufacturing and



3. Liquid metal can replace pressurized fluid or solutions of fuel as a heat carrier. It has a very high boiling point, doesn't need high pressures. But sometimes it is difficult to handle.

4. Direct boiling is simple. Steam forms in the heart of the reactor, goes directly to a turbine. So it eliminates in-between heat exchangers, which have heat losses. But direct boiling hampers reactor chain reaction. One improved system of G.E. smooths that out.

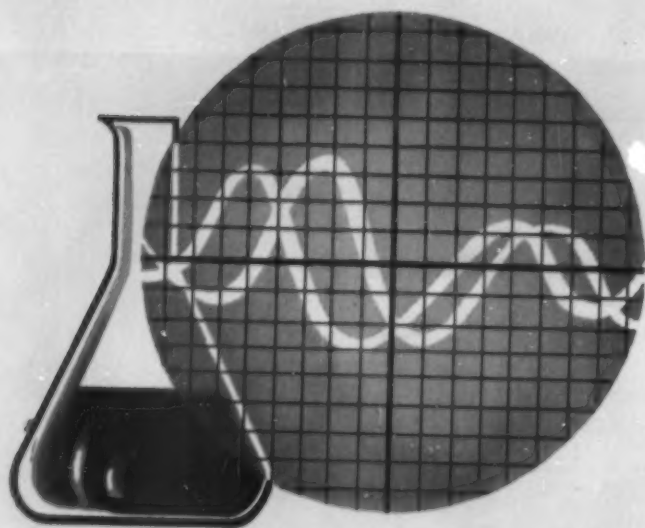
Choices Line Up

engineering firms for a practical nuclear reactor. These companies are not only ready but eager to do business in this new field. And the power company can take its choice of four principal types of reactors: pressurized water, homogeneous, boiling water, and liquid-metal cooled. They differ from one another in the way heat is taken from the re-

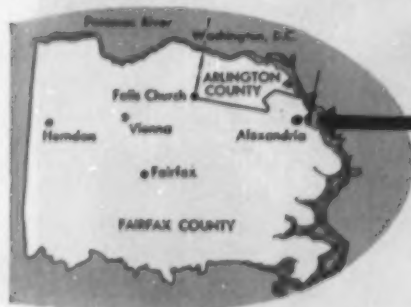
actor core to produce steam. All are hitched to a conventional generating unit.

• **Specialization**—The companies manufacturing and designing reactors are specializing in different types. And each is prepared to make a strong sales pitch to a prospective customer on the costs and advantages of its reactor.

Most of the companies that have jumped into the reactor business are the big firms that have been serving the utility industry for years. But some companies are new to the utility field. Among the leaders in the business of designing and building reactors for power production are: Westinghouse Electric Corp., General Electric Co., Babcock & Wilcox Co., American Machine & Foundry Co., North American Aviation, Inc., Foster Wheeler Corp., Combustion Engineering, Inc.,



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The nuclear reactor doesn't supplant all the equipment in a conventional power station. In a thermal plant, in effect, it replaces the boiler. The fission of nuclear fuels does the same job as the combustion of coal, oil, or gas.

But a utility can't simply scrap its boilers and replace them with nuclear reactors. A reactor and turbogenerator must be tailored closely in design and operating conditions. For instance, present reactor designs would produce steam at lower temperatures and pressures than those supplied by a modern utility boiler.

• **Variables**—Neither can a utility pick an off-the-shelf reactor because there is little standardization in the business yet. Different types of reactors are designed to meet a variety of operating conditions. These cover fuels, the way these are fed to a reactor, the speeds at which their fission takes place, and the methods used for processing still other fuels inside the reactor. The reactor designer must work with these variables. Right now the manufacturers are anxious to start with one design and get some real operating experience with it. So each manufacturer is not combining the variables in all possible ways. But later on they probably will. The result will be a good many more designs—and among them will probably be the one that's best suited for utility use in the long run.

• **Fuels**—In the matter of fuels, the designers have a fairly wide choice. To begin with, there is uranium-235, the only natural material that can fission by itself. Uranium-233 and plutonium-239 also fission, but are man-made. They can be made, it happens, in the same sort of reactor that is used for power production. So a reactor operator can pad out his fuel with uranium-238, or thorium, which are called fertile fuels (BW-Apr. 9'55, p180) because they are the raw material from which plutonium and U-233 are produced.

A reactor that produces more fuel than it burns is a breeder; one that can make about the same amount it burns is a converter.

A reactor manufacturer picks the fuels or a combination whose economics look particularly good, or whose chemistry it knows most about. The reactor being built by Babcock & Wilcox for Consolidated Edison Co. of N. Y. is a converter that will use uranium and thorium together. The fission of U-235 also will convert the thorium to another fissionable element—U-233. General Electric is using straight uranium dioxide in its dual-cycle boiling reactor.

• **Operating Characteristics**—The other variables in reactor design are operating characteristics. A reactor that has

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lumps of fuel suspended throughout its solid structure, say a mass of graphite or heavy water—is called heterogeneous. A homogeneous reactor, on the other hand, has its fuel, coolant, and moderator entering the reactor core in a single mass—usually liquid.

The speed of the fission process, the rate at which the neutrons travel in the reactor, determines the size of the fuel-load a reactor needs in order to be self-sustaining. Thermal reactors—the ones with which the industry has the most experience—have low neutron speeds, and call for a big inventory of relatively cheap fuel. At the other extreme, a fast reactor has a small mass of expensive fuel.

• **PWR**—Of the four principal types of reactors on the commercial market today, pressurized water reactors are the oldest, and the most popular so far in industry. The farthest along in construction is at Shippingport, Pa. Westinghouse is building the reactor for AEC. Duquesne Light Co., which is building the conventional portion of the plant, will buy the steam. Con Edison's atomic power station also will use the PWR. Yankee Atomic Electric Co. is dickering with Fluor Corp., Ltd., for the same type—for an atomic station at Rowe, Mass. And Alco Products, Inc., formerly American Locomotive Co., has an Army development contract for a packaged pressurized water reactor designed for portable field service.

The water that takes heat from the reactor's core is under very high pressure to keep it from boiling. After it has picked up heat—and radioactivity—in the atomic pile, the water flows to a heat exchanger. Here the heat is transferred to "clean" water in another system to produce steam that drives the turbines.

• **Pros and Cons**—The PWR has one initial advantage. It is a safe unit that has already racked up hours of operating experience on a test block, and has successfully propelled the submarine Nautilus, where the turbine service is not unlike that in a power station. So, for companies like Con Edison the reactor's workability has been proved. And PWR lacks the trickiness of other innovations.

But others—both manufacturers and prospective users—are wary about PWR's need for high strength equipment to contain the pressurized water. That keeps the costs high. And the price could go still higher if a power company wanted a reactor that could produce more power. Some feel, too, that PWR's armor-like construction won't allow any flexibility, such as extra exchangers that could tap more heat from the reactor core.

• **Aqueous Homogeneous Reactor**—That's why a few reactor builders have turned to other designs. Foster Wheeler

AN IMPORTANT MESSAGE CONCERNING...

A Basic Advance In Motor Insulation

ELECTRIC motor and generator insulation has come in for its share of announcements of "new" and "revolutionary" developments. But in spite of these announcements, inherent shortcomings of conventional insulation have remained.

There has been little basic improvement in motor insulating systems . . . UNTIL NOW.

Allis-Chalmers, working with engineers and scientists of Dow Corning Corporation, has developed *Silco-Flex* motor insulation . . . truly new in concept . . . truly new in effectiveness.

The *Silco-Flex* insulation system employs a pure silicone rubber combined with specially developed application techniques to produce an insulation unmatched by any other in use today. Outstanding improvements are shown in all these important characteristics:

Homogeneity — The complete *Silco-Flex* coil insulation is vulcanized into a single piece with no joints, voids or splices which can develop into breaks in the insulation. Even the best of the new conventional insulations combine several dissimilar materials which are held together by binders.

Heat Resistance — The excellent dielectric and mechanical properties in silicone rubber do not change significantly with aging at high temperatures over long periods of time.

Moisture Resistance — Completely sealed, *Silco-Flex* insulated coils are the most moisture-resistant coils ever produced.

Chemical Inertness — *Silco-Flex* insulation has outstanding resistance to most atmospheric contaminants, corona and weathering. It also withstands weak acids, alkalies and lubricants.

Flexibility and Resilience — *Silco-Flex* insulation remains flexible and resilient indefinitely under operating conditions. It is especially resistant to mechanical abuse and

to the stresses brought about by overloading and rapid starting and stopping. It is also amazingly resistant to abrasion.

Heat Dissipation — Most electric insulators, unfortunately, are also heat insulators. *Silco-Flex* insulation, by comparison, is an excellent heat conductor and materially assists in removing heat from the coils.

What Are the Benefits?

The characteristics of this new insulation are so remarkable that complete reappraisal of motor application practices and motor performance is indicated.

In *all* applications, the chemical, mechanical and electrical properties of *Silco-Flex* insulation insure increased service reliability and longer life.

In addition, this new insulation system may reduce or eliminate the need for special motor enclosures. Atmospheres contaminated with cinders and fly ash, for instance, will have little effect on *Silco-Flex* insulated windings. Similarly, abrasive dusts in steel mills will not harm this insulation. Savings through the use of open, instead of totally-enclosed, frames will also be possible in chemical, paper, food and other industries where water or corrosive atmospheres are a problem.

What About Availability?

New *Silco-Flex* insulation is immediately available for all Class H form-wound coils and for Class A and B windings operating under selected service conditions.

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on location exactly as needed. And In-
ternational Service measured up on
all counts. In fact, delivery was al-
ways well ahead of schedule!

That's the complete — and com-
pletely integrated — steel fabricating
service which has won International
nation-wide favor. We'll consider it a
favor to work with you, too, on any
project involving any form of fab-
ricated steel.

2060 EDGAR STREET
EVANSVILLE 7, INDIANA



INTERNATIONAL STEEL COMPANY

Corp. is developing an aqueous homo-
geneous reactor, and says it can have
one generating power by around 1960
at costs close to those for conventiona-
l stations. A fuel solution of uranyl sul-
phate is pumped outside the core to
four steam generators rated at 600 psi.
At the same time a blanket of thorium-
232 surrounding the core converts to
U-233 that can refuel the reactor. To
add another 17% to the total power out-
put, two exchangers take heat from the
breeding area inside. The reactor could
power a 100,000-kw. plant. The liquid
fuel, Foster Wheeler feels, is one ad-
vantage. It needs less control than
pressurized water systems. And the
fuel fabricating problems are lesser than
those you get with solid materials.

• **Boiling Principle**—General Electric
has taken a different tack, and com-
pletely by-passed heat exchangers. It
has developed a system called dual-
cycle boiling, an advance from a prin-
ciple called direct boiling. Right now,
GE has one order for this reactor al-
ready on its books, waiting for AEC
approval. The reactor would power the
biggest atomic plant yet, a 180,000-kw.
station near Chicago, Ill., for Common-
wealth Edison Co.

Direct boiling, pioneered by AEC's
Argonne National Laboratory, is the
simplest way of making steam in a re-
actor. The water is pumped directly
inside, and heated into steam. The
chief drawback is that steam output
drops off when a load comes on the
generator. The sudden formation of
more steam chokes up the chain reac-
tion and cuts down the available heat.
Dual-cycle boiling improves upon this
system through use of a kind of gov-
ernor.

As the load goes up, cooler water
feeds into the reactor, and prevents a
too sudden formation of steam. That
sustains the chain reaction of the fuels.
Despite its extra gear, dual-cycling is
claimed to produce more power in a
given size than earlier types.

• **Liquid Metals**—Liquid metals can
replace water and its drawbacks of high
pressures or steam formation. Working
with liquid sodium, North American
Aviation, Inc., is putting up a research
reactor for AEC that's slated for com-
pletion by the end of the year. It also
has a deal with Consumers Public
Power District, Columbus, Neb., for a
75,000-kw. reactor.

Some think that liquid metals are
still too advanced for the power industry
right now. But they have their ad-
vantages. A liquid metal is a good heat
carrier, and has a boiling point far be-
yond that of water or other liquid. It
doesn't need pressurization. Nor does it
have the quirks of steam. But liquid
sodium, for one, is a sensitive, danger-
ous chemical if it is not handled
properly.

INDUSTRY GEARS FOR HIGHER PRODUCTIVE STANDARDS



C.P.C. 

helps **ALCOA** trim
massive forgings....and trim some costs too

Trimming a massive aluminum forging presents an unusually tough production problem. The irregular shape of the parts imposes tremendous off-center loading on the press ram. Then, too, the point at which the material shears is unknown. When the resistance against the ram changes, in a split second, from, say, 1,500 tons to absolutely nothing, the shattering

effect of break-through shock is the result.

Many problems as complicated as these had to be worked out by "Clearing Productivity Consultants" before they submitted plans for the press shown above to Alcoa engineers. An important consideration, for example, was manpower. In spite of its size, this machine is operated by just one man. From the remote, pulpit-like control

station, the operator gets a wide-open view of the die area and he can put the full 2,000 tons of pressure to work with surgical deftness and precision.

Few people have a problem exactly like this one. But if you're thinking about boosting efficiency of your press-working facilities, we'd like to talk things over with you. Call on us at any time at no obligation.

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 657 BROADWAY, NEW YORK 12, N.Y.

TV Goes to

Wiring a chassis is different now. Next



1946

Hand Assembly
 Hand Wiring
 ✓ Hand Soldering

Some companies still use these old techniques today. A fast production line must have about 125 workers.



1952

Hand Assembly
 Hand Wiring
 ✓ Dip Soldering

Hand soldering is eliminated. A tank of molten solder does the job in one operation. Production is faster, with fewer people on the line.

Now, Assembly by

Said the production head of one television manufacturing company last week, "Why pick on us? Sure we're making the switch. But we've got to. Competition is doing it too."

He was talking about the latest move on the TV road to automation sketched above. This newest switch—from hand assembly to machine assembly of components onto a television or radio chassis—is having major repercussions in the electronics industry today. By the end of the year, according to one industry authority, assembly machines will be at work in three of the biggest TV-radio companies in the U.S. By next year, machine assembly will be going strong.

The prospect is causing many in the electronics industry to worry about organized labor's attitude. Labor, on the other hand, is equally concerned about what the industry will do with this newest technological development.

• **Step by Step**—Of course, this storm has not blown up overnight. Three years ago, a few companies took the first

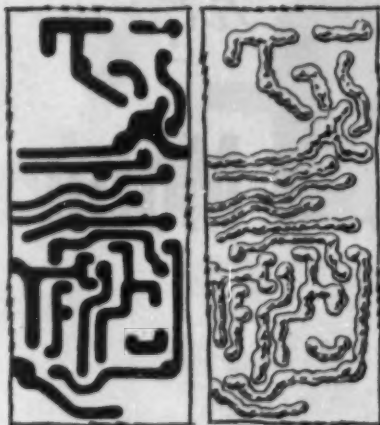
step when they stopped soldering by hand. A tank of molten solder took over the operation (second sketch). Instead of soldering each of a hundred-or-so components into place on a chassis—one component at a time—one dip into the tank did the whole job.

Then, about two years ago, etched wiring came along. Instead of connecting the components with many short pieces of wire, all of the wiring was etched—or "printed"—onto a board. Each component was fitted into its proper place on the board—by hand; then, by dip soldering, all of the components were attached to the etched wiring.

This development is beginning to show up in sets now, as companies start displaying their 1956 models. One Radio Corporation of America distributor (RCA's new line went on display last week) makes this boast: "Everything you will see is entirely new... completely new chassis... new tuning devices... prices are down as much as 29%."

Automation

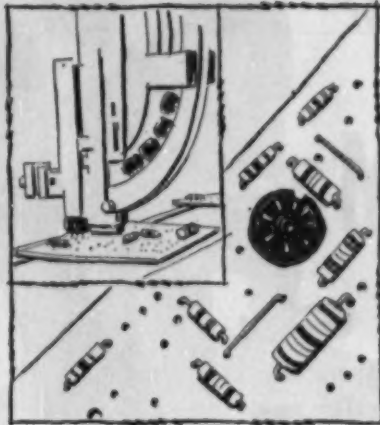
Year may bring the biggest change of all.



1953

✓ **Hand Assembly**
✓ **Etched Wiring**
Dip Soldering

Hand assembly is reduced, because wires don't have to be connected. They're etched onto a board. Production line can operate with about 90 workers. Many companies have not yet come this far.



1956

✓ **Machine Assembly**
✓ **Etched Wiring**
Dip Soldering

Machines do the assembly work. Production line drops to about 40 people. Displaced workers move to other jobs in the plant. Only one company has come this far, but 1956 will be the year for several others.

Machine for TV Sets

But the really big change—automatic assembly—is not yet far enough along to be found in most 1956 models. (Admiral Corp. is one exception. Insofar as this change goes, Admiral seems to be a few months ahead of the industry. About 75% of the circuitry in the new models it introduced last week was assembled by automatic equipment.)

The change to automatic assembly will begin to take shape in other plants later this year. Because it's expensive, most companies that switch to it will only break even on costs in 1956. In 1957—or so the experts seem to believe—this newest development in the industry will begin to bring operating cost reductions.

• **What Is Automatic Assembly?**—When you couple it with dip soldering and etched wiring, automatic assembly brings the industry close to fully automatic production. With a single machine, components are fitted onto a chassis automatically. One such machine that's now in action can produce about 200,000 assemblies a month. In

a minute, it can produce 20 assemblies; working by hand, a fairly fast assembly line would need about 20 minutes to match what this automatic machine can do in one.

This particular machine is a product of General Mills, Inc., Minneapolis. To date, the company has delivered just the one machine—to International Business Machines Corp., which is using it to produce circuits for military radar equipment. General Mills says it has several other such machines under construction. One is to be delivered to a radio manufacturer within a month or two.

The company won't name the manufacturer; some in the trade believe it is Bendix Aviation Corp.'s Radio Television & Broadcast Receiver Div. at Baltimore. (Bendix said earlier this year that it was switching to etched circuits in its production of auto radios for the Ford Div. of Ford Motor Co.)

• **Other Producers**—The United Shoe Machinery Corp., Boston, is farther along in the production of automatic

THE TALK

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FROM *finance* **TO**
fasteners!



Time was when a discussion of bolts and nuts was below the dignity of "top brass". They concerned themselves chiefly with high-echelon financial matters.

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Just turn the *key..* **An R & M Motor**

Just turn the key, and a Robbins & Myers custom-designed motor starts the powerful new Mercury 4-cylinder-in-line Mark 55E 40 HP outboard motor, and also the popular 18 HP Mercury Mark 25E model.

This outstanding electrical starter and generator system is the result of extensive research and design work by engineers of the Kiekhaefer Corporation, Fond du Lac, Wisconsin, makers of Mercury outboard motors. Rigid requirements were established on all parts to assure unfailing performance and long service under the conditions in which outboard motors must operate.

One of the most important single factors is the starting motor. It must operate on the 12-volt system, be compact, provide high torque. It must withstand the heavy starting load, rough handling, vibration, exposure to marine conditions. Kiekhaefer engineers handed the problem to Robbins & Myers motor design specialists.

These R & M engineers custom-designed the motor for the job. It develops 8/10 HP at 6000 RPM. It's compact, with an overall length of 6 inches and outside diameter of less than 3½ inches. Commutator, windings, and connections are specially designed for 12-volt service. The motor shaft is specially splined and hardened to resist sudden starting loads. The whole motor is marine-treated with special moisture-proofing to protect it against fresh and salt water, and tropicalized with fungicidal lacquer.

Kiekhaefer engineers, after extensive tests, report that the R & M motor amply meets all the requirements. It has now been used on the Mark 55E and Mark 25E for millions of enjoyable hours. Users are enthusiastic about the smooth, unfailing performance of the "Turn-the-Key" starting system.

Above, cutaway view of the Mercury Mark 25E outboard motor showing location of the R & M starter, and, right, R & M matched motor parts custom-designed especially for this application. Parts are marine-treated and tropicalized to resist salt water and fungus.



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NEW YORK • TORONTO

"... Carey of CIO said that Raytheon is ready with an automatic assembly line that requires only two operators. A Raytheon V-P said, 'That's news to me.' ..."

TV starts on p. 58

equipment for radio and television set manufacturers. Late last month, United Shoe shipped its first two commercial units.

United Shoe will not say who bought the units, though it is fairly common knowledge in the trade that the two customers were RCA and Emerson Radio & Phonograph Corp., New York. It is also fairly well known that RCA, Emerson, and General Electric Co. have been experimenting with United Shoe equipment on a pilot basis since late last year.

One other company working on automatic assembly equipment is ACF Industries (formerly American Car & Foundry Corp.). More than a year ago, the company began to adapt the National Bureau of Standards-Navy Bureau of Aeronautics development—Project Tinkertoy (BW—Oct. 10 '53, p72)—to commercial set production. ACF took over the modular-construction idea, but changed the name to Compac modules, because the word Tinkertoy is trade-marked by A. G. Spaulding & Bros., Inc.

ACF says now that it has a couple of orders, but observers in the industry believe ACF's approach to automatic assembly will not show up so well in commercial production as it has on military projects, where flexibility, rather than mass production, is the important factor.

• **Shake-Out**—To get into automatic assembly, a manufacturer has to expect to spend a big chunk of money. A United Shoe machine costs about \$150,000—that's a machine with 30 or 40 stations on it. (Each station feeds out one component. With 30 or 40 stations, the set manufacturer assembles a combination of components—resistors, capacitors, tube sockets, transformers.) A General Mills machine costs a little less, but its price is more than \$100,000.

The high cost of equipment will keep many set manufacturers away from automatic assembly. Says one industry observer, "This is bound to shake out some of the smaller producers."

Today, the industry shapes up like this: There are five major set producers: RCA, Admiral, Motorola, Philco, and Zenith. Together, they account for more than half of the industry's output. Then there are a dozen-or-so smaller producers—such companies as Raytheon, Sylvania, and CBS-Columbia—that account for another 30%. The rest is grabbed up by a large number of very small manufacturers—probably as

many as 80. It is this large, but less productive group that will be most seriously affected.

• **Cost Cutting**—You need only to look at what Admiral Corp. is doing to see how the switch to automatic production is going to tighten the industry. Admiral is currently running at the head of the industry from a cost-cutting standpoint.

Neither General Mills nor United Shoe had a machine to sell when Admiral made its decision to switch. So, over the past couple of years, Admiral has been building its own automatic assembly equipment.

It now has three automatic assemblers in operation at its Harvard (Ill.) plant and four more under construction. These machines, plus other equipment that etches circuit wiring onto copper-coated boards, has made it possible for the company to eliminate 425 hand-soldered connections from each television receiver.

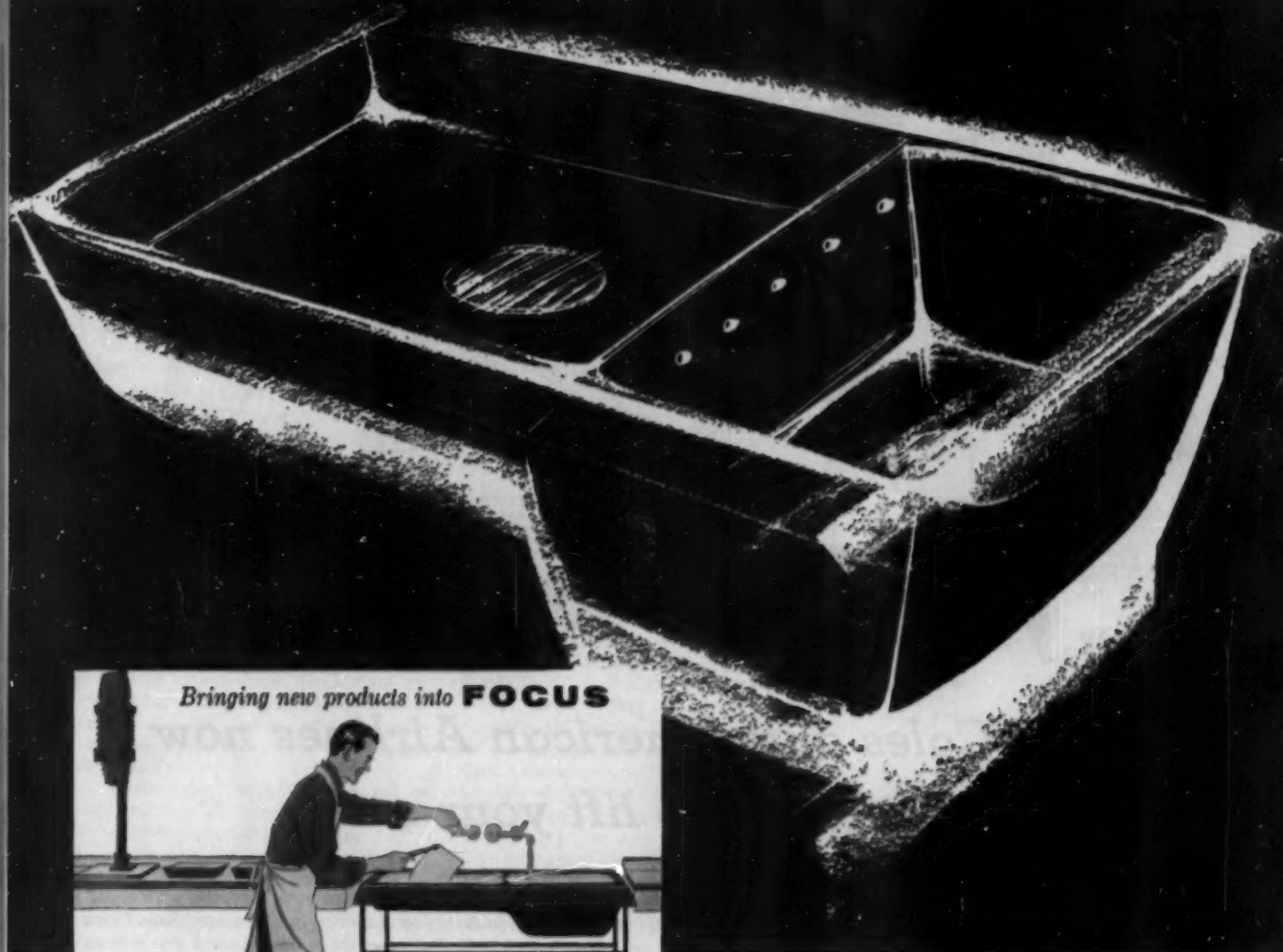
The result is a sizable cost reduction. Take this example: Admiral's new line includes a 24-in. console-model television receiver that retails for \$340. One year ago, the same model retailed for \$500.

Admiral is by no means the only set manufacturer that has worked on its own automatic-assembly machine. Just about every important manufacturer in the industry has tinkered with an idea of its own in its own laboratories. (RCA is known to have bought an Admiral machine. Also, the company says that it is designing another machine on its own.)

• **Labor's View**—James B. Carey, president of the International Union of Electrical Workers (CIO), the labor organization that covers most of the industry, has had some startling things to say about automatic equipment. For example, Carey said recently that Raytheon was ready to put into operation an automatic assembly line that will produce 1,000 radios a day, with only two operators required to operate it.

Raytheon's radio and television vice-president, Henry F. Argento, said last week, "That's news to me. Either they (IUE-CIO) got their wires crossed or they're trying to rag the AFL." (Raytheon radio and TV workers are represented by AFL.) Argento added, "There are no changes in our assembly operation, now or in the planning stage, that could give rise to such a prediction. I only wish the statement [by Carey] were true."

Carey also said that Motorola had de-



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The ideal material for such a sink is at hand. By using fibrous glass, bonded with polyester resins, the sink could be molded in one piece. Its weight would be negligible. Its strength would be great. And its cost could be low.

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damaging the sink—no rust to contaminate prints.

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veloped a machine that can "spit out complete radios" when components are fed into it, that not a human hand touches the set.

Motorola says that the statement is not correct. The company has used a Motorola-developed plated circuit in more than 300,000 radios; further, some automatic machinery has been used to assemble circuit components. But, says the company, it is not making radios in a fully automatic manner; many human hands touch the set during production.

Carey has been making these and other remarks about automatic operations for the past several months, probably because his organization has been in negotiation with companies over new contracts. Few observers doubt that he would like to push through his own version of a guaranteed annual wage. Talk about "fully automatic" factories might help that cause along.

• **Jobs**—Carey took GE to task recently for "boasting that printed circuits will reduce a company's labor force by 50%." In its reply last week, GE said that the use of printed wiring boards is another in a series of production improvements resulting in lower manufacturing costs, lower product price, increased availability, and increased demand.

"Historically," said GE, "the net result has been an increase in manpower to meet that demand. The use of . . . printed wiring boards in . . . GE table model radios has reduced the labor formerly needed in conventional wiring operations for such radios. On the other hand, it has resulted in employment for other GE employees. . . ."

Again, Admiral is probably the best example of what happens to a company's labor force when it switches from manual to automatic production. A year ago, when it was still doing its assembly work by hand, Admiral employed around 10,000 people. Today, with 75% of its circuitry produced by automatic machines, the labor force still numbers about 10,000 people, with comparable or slightly higher skills. (Incidentally, Admiral says it has had no difficulty with its AFL union in making the switchover.)

• **Product Quality**—In addition to turning out completed circuits in a hurry, the new automatic equipment is able to do it with fewer chances of error. Admiral figures that its equipment reduces the chance for possible human error by over 99%. United Shoe talks in the same terms about its new equipment.

This added reliability reduces one of the most costly items of radio and television set production: human inspection. Inspection accounts for about one-third of the labor cost of hand-assembled set production.

PRODUCTION BRIEFS



Giant blast furnace at Great Lakes Steel Corp. is called the biggest furnace (30 ft. 3 in. hearth diameter) in the world; GLS hopes it will turn out a record 60,000 tons of iron a month. The company says hearth diameters haven't moved up very fast; the first 20 ft.-diameter hearth was built in 1918. This new one is said to be the first to exceed 30 ft.

Finally, American Airlines has decided who will make its 400-mph.-plus medium size turboprop transport. Lockheed Aircraft Corp. gets the \$65-million contract for 35 Electras, the first commercial U. S. turboprop planes. Lockheed plans specify Allison's model 501 engine, the only commercially available U. S. turboprop engine (BW-Jun. 11 '55, p. 86), but American Airlines says it isn't sure yet what power plant the Electra will use.

• **Will the engineers move?** The American Society of Civil Engineers wants more time to decide whether to move its headquarters from New York to Pittsburgh. Cities still in the running: Philadelphia, Washington, Chicago. Newest entrant: St. Louis. But Pittsburgh still seems to be the most likely choice, if the societies move at all.

• **Voices at sea:** The first transatlantic telephone cable will start slipping into the sea late this month. The cable's main span, 2,250 miles long, will stretch from Clarendville, Newfoundland, to Oban, Scotland. The project is a joint venture of American Telephone & Telegraph Co., the British Post Office, and Canadian Overseas Telecommunication Corp.

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NEW PRODUCTS

Tuning at Ease

This relaxed fellow is tuning his TV set with a flashlight. Using the flashlight, a little skill, and one of Zenith Radio Corp.'s new Flash-Matic TV sets, he can turn the set on and off, change stations, and increase or lower the volume. All this is handled by circuits inside the set that are triggered by light-controlled electronic eyes.

With each of its Flash-Matic TV sets, Zenith includes a special light gun, but an ordinary flashlight will do the job satisfactorily. The sets are equipped with sensitivity controls that can be adjusted so the set will not respond every time you turn on the room lights.

• Source: Zenith Radio Corp., 6001 W. Dickens Ave., Chicago 39.



IT'S EASY: TV tuner with a twist spins the dials by remote control.

Speeding the Press

In sharp contrast to thunderous printing presses is this quiet newspaper counter and stacker. Seen here in the mailing room of the Milwaukee Journal, the machine receives papers directly from the presses via a conveyor belt. As the papers drop down the chute they are counted electronically and stacked mechanically in neat bundles of 50.

The counter and stacker can be controlled to produce bundles of any desired number.

The machine does away with the standard method of counting newspapers. Under the conventional system, the press kicks every 50th newspaper sideways and men have to count the papers and stack them by hand.

• Source: Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1.



IT'S SPEEDY: This electronic counter and stacker is faster than a man.

Bins for Big Loads

Railroad customers who ship bulk loads of flour, sugar, or powdered chemicals in bags may save money if they use this Container Car. The car—shown here being unloaded—is made up of a special flatcar and 28 reusable storage bins.

The maker says the bins can be unloaded faster than a regular hopper car, avoid the trouble of handling individual bags, and can be used to contain materials while they're being trucked from railroad to plant. On its first run, Container Car carried 84,000 lb. of flour and was unloaded in 33 minutes.

Some railroads have agreed to count the bins as part of the car, and won't charge for carrying them, either full or empty.

• Source: Shippers' Car Line Corp., 30 Church St., New York, N. Y.



IT'S CHEAPER: Combination car unloads fast, saves on freight rates.

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This is not as fantastic as it sounds. If you modernize an existing bank of 4 car switch elevators to completely automatic AUTOTRONIC® operatorless elevators this is what happens: The magic of electronic group supervision greatly reduces passenger waiting time. And automatic car operation reduces travel time. The result is 25% better service—without adding the fifth car!

Further, completely automatic AUTOTRONIC elevators end all concern about elevator operators. Each car has an "automatic elevator operator" on duty every minute of the day and night. Every "operator" is fully trained, with instantaneous reflexes that never tire or slow down. And every "automatic" operator saves up to \$7,000 a car, each year—making the modernization self-liquidating!

traffic speeding elevator doors

It doesn't make good sense to combine high speed elevators with slow closing hoistway and elevator car doors. Seconds saved at each elevator stop can add up to hours of faster service in a busy building. Only Otis Electronic Elevator Doors—with the electronic zone of detection—have been designed to encourage people to step livelier—and speed traffic!

unmatched elevator door safety

It's always well to remember that every elevator entrance has two doors. First, the hoistway door; and second, the elevator car door. This is of utmost importance, because passengers in high speed operatorless elevators should always be protected from both doors—for the highest degree of safety! Only Otis Electronic Elevator Doors with the electronic zone of detection (as illustrated in phantom) provide double-door protection—as described in Otis booklet 8-807. This unmatched safety—obtainable only with completely automatic AUTOTRONIC elevators—is available at only slightly extra cost above such standard equipment as rubber-edged contact doors, electric rays, and single-door protection.

stepping safely with style

Because those floppy new plastic women's overshoes can—and sometimes do—get stuck between the steps of escalators, Otis engineers have come up with a new safety step. It's cleated in a way to prevent such a mishap. It's now available for new installations.

delivering the promise

Otis construction skill delivers the promise that forms the basis of every Otis contract—the world's finest elevating! Elevator construction skill calls for men with an unusual combination of skills—those of a rigger, iron worker, machinist, electrician, carpenter, and sheet metal worker plus long Otis training in studying elevator parts, assemblies, functions, construction procedures, final testing and adjusting.

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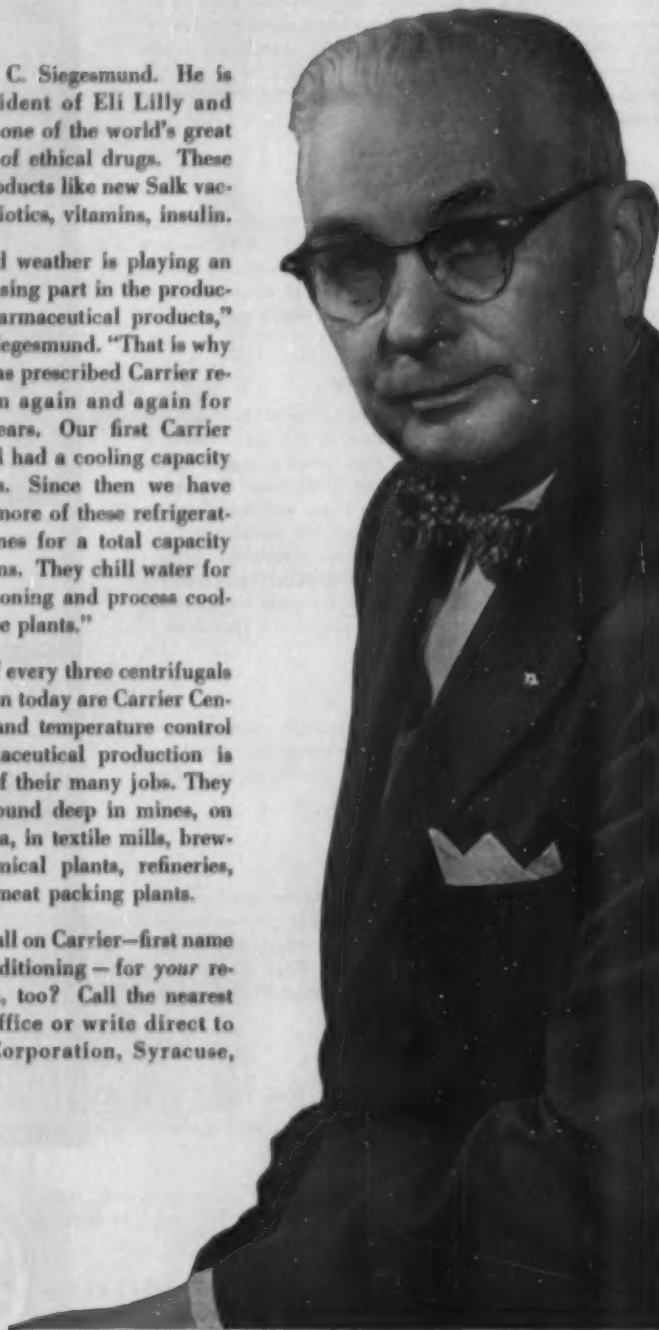
"Eli Lilly has prescribed Carrier refrigeration again and again for over 26 years"

This is J. C. Siegesmund. He is Vice-President of Eli Lilly and Company, one of the world's great producers of ethical drugs. These include products like new Salk vaccine, antibiotics, vitamins, insulin.

"Controlled weather is playing an ever-increasing part in the production of pharmaceutical products," says Mr. Siegesmund. "That is why Eli Lilly has prescribed Carrier refrigeration again and again for over 26 years. Our first Carrier Centrifugal had a cooling capacity of 87 tons. Since then we have added 13 more of these refrigerating machines for a total capacity of 4590 tons. They chill water for air conditioning and process cooling in three plants."

Two out of every three centrifugals in operation today are Carrier Centrifugals, and temperature control for pharmaceutical production is only one of their many jobs. They are also found deep in mines, on ships at sea, in textile mills, breweries, chemical plants, refineries, food and meat packing plants.

Why not call on Carrier—first name in air conditioning—for your refrigeration, too? Call the nearest Carrier office or write direct to Carrier Corporation, Syracuse, New York.



NEW PRODUCTS BRIEFS



The long thin rod in the picture is a new oxide coating, said by the maker to give the best protection against high temperatures that has ever been commercially available. Norton Co., Worcester 6, Mass., claims its Rokide oxide coatings can be used in rocket nozzles, motor linings, jet tail pipes, gas turbine combustion chambers. The rods are fed into a flame gun that sprays particles of molten coating onto the prepared surface.

Its diesel-electric oil driller is powered by an engine that's smaller, lighter, and easier to move than power systems now in use, says Electro-Motive Div. of General Motors. The division also claims that the units are less expensive than diesel-electric rigs now on the market, and compare favorably with the price of heavy diesel-mechanical rigs.

Air conditioning under the stars: A. R. A. Mfg. Co., 1041 Foch St., Fort Worth, sells an air conditioning unit for drive-in theatres. The unit is mounted on a stand beside the car, has two tubes that fasten onto the car's window. One tube feeds in cold or hot air, depending on the season, the other pulls stale air out of the car.

Strips of colored aluminum roll continuously from the production line of Fromson Orban Co., Inc., 261 Madison Ave., New York 16. The company believes this is the first time that continuously anodized and dyed aluminum strip has been commercially available in the U.S., says its product is non-tarnishing, and has a constant and uniform finish. Strip widths range from 1 in. to 20 in. Fromson says its gold and brass dyes don't fade, but other colors don't lend themselves to outdoor use.



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There's a lesson being learned in school construction today that can be profitably applied to *your* building program.

Where PYROFILL incombustible gypsum roof decks are used, you realize a full measure of safety; substantial savings on fire insurance—up to 30% over combustible construction. And lightweight PYROFILL permits important savings in structural steel; adapts to any architectural design. It's quickly poured in place over permanent formboards. Acoustical PYROFILL roof decks provide insulation and high sound absorption.

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GOVERNMENT

Washington Rides Out H-Drill

Everyone had a place to hide but Congress . . . No premium prices paid to defense contractors . . . Subscription TV . . . Maryland fights for Air Force center . . . Engineers: scarce . . . Gas industry disunited . . . Too many war plants.

On Wednesday afternoon, a hypothetical H-bomb dropped on 11th and F Street in Washington, but Pres. Eisenhower and some 15,000 top government officials had already taken flight in the biggest civil defense test of the Atomic Age.

Eisenhower directed government affairs from a secret relocation center near Gettysburg, Pa. Military brass were at the emergency pentagon at Fort Ritchie on the Maryland-Pennsylvania line. Other officials were at secret sites in southern Pennsylvania, the Carolinas, Maryland, and Virginia, working on theoretical war problems.

At the same time, under simulated H-bomb attacks on some 50 cities scattered throughout the country, civil defense officials tested evacuation and shelter plans, bomb assessment techniques, and other preparedness problems.

The exercise actually began six weeks ago, when 31 government agencies, designated as essential, set up emergency relocation centers at college campuses, government field installations, bivouac cities, and other facilities within 300 miles of Washington. In case of war, most of these sites presumably would become emergency headquarters for various government agencies.

As part of the test, Eisenhower inspected various emergency centers and reviewed drafts of directives and proclamations he would likely need to issue in case of an actual bomb attack.

Meanwhile, back in Washington, some congressmen were squawking. No one had said where they were supposed to hole up.

In the six months since the Pentagon switched its arms-buying policy (BW-Dec.18'54,p25), no base-broadening military contracts involving price differentials have been awarded.

In December, the Defense Dept. issued a well-publicized directive authorizing premium prices to companies it wanted to keep in military production. The directive covered procure-

ment of some 970 top-priority hard-goods.

According to latest Pentagon records, the services have let 38 contracts valued at \$302-million for such equipment—none at premium rates. Included are 15 contracts totaling \$21-million for new procurement—that is, items never produced before by the contractors. Among the companies: Eastman Kodak Co., Caterpillar Tractor Co., Lewyt Corp., Minneapolis-Honeywell Regulator Co., Mergenthaler Linotype Co.

No decision by the Federal Communications Commission on subscription television is imminent, even though a landmark in the paper battle has been passed.

As of June 9, FCC stopped formal receipt of initial comments from the public and industry on the bitterly controversial subject.

Upwards of 10,000 letters—pro and con—poured in on the commission. Next landmark: July 11, the deadline for filing of replies to the initial comments.

What happens after that is anybody's guess. A good one is that FCC will study pros, cons, and counter-arguments from all sides, then, sometime in the fall, announce a schedule for public hearings that probably won't start before winter.

The Air Research & Development Command may move from Baltimore to Dayton—but only after a Senate fight.

This week the Air Force got an O.K. from the House Armed Services Committee, but Sen. John Marshall Butler of Maryland opened a battle to keep the unit in Baltimore. Butler accused Air Secy. Harold E. Talbott of going along on a money-squandering plan aimed chiefly at embarrassing him, the senator.

He said that he was aware of his unpopularity at the Pentagon. Butler

is generally regarded as a "McCarthy Republican."

Talbott called Butler's statement "unfair, improper." He said the R&D headquarters in Baltimore have an "impossible physical layout." In the long run, he said, the move to Dayton would save money.

Best bet: Butler will lose, and the center will move to Dayton.

How scarce are engineers, really? Conflicting stories have come out of the National Science Foundation survey of 200 companies that do most of the nation's industrial research and development work. The official word: Engineers are pretty scarce.

Earlier stories based on NSF's closely guarded report said talk of a general shortage of scientists and engineers is exaggerated (BW-May28'55,p38). They said the only real shortages are for experienced men in specialized electronics and aircraft fields. These reports stirred up a fuss in technical circles. Scientists feared they would discourage efforts to recruit science and engineering students.

This week, Dr. Alan T. Waterman, NSF director, released one bit of the report. It shows that half the companies interviewed are short of scientists and engineers, with major shortages in one-third of the 200 firms.

Legislation to free independent natural gas producers from federal regulation is approaching a crisis. But the oil and gas industry is still badly split.

Backstage dissension was evident as Rep. Oren Harris' bill to remove producers from Federal Power Commission jurisdiction barely cleared its first hurdle. The Harris bill got a narrow 16 to 15 approval from the House Interstate Commerce Committee. Harris, an Arkansas Democrat, immediately filed a resolution asking for a Congressional investigation of the interstate gas pipeline companies and local gas distributors. Spokesmen for these interests had opposed his bill.

The independent producers are hopeful that the investigation threat will whip the pipeline and distributor people back into line. The bill needs solid support, for a close vote is expected in the House. However, Speaker Sam Rayburn favors the bill, and it may



ONE OF THE FIRST new Blue Brute rotary compressors at work on a new home development in New York. Worthington distributors everywhere are now demonstrating and delivering these new Blue Brutes.

New compressor makes life easier for construction men

It's the brand-new Blue Brute Rotary Compressor — Worthington's latest contribution to the construction field.

Cutting start-up time, operation troubles and expenses on construction jobs is just what it was designed for. The Blue Brute Rotary picks up where other rotaries leave off. In the first place, the new Blue Brute is equipped with a *clutch* — to make for easy cold-weather starting. Then there are its *self-draining cylinders* that keep oil from clogging up the works. And for easy inspection and maintenance, Worthington engineers designed the Blue Brute so that the average mechanic

can remove and replace worn blades in minutes, using only standard tools.

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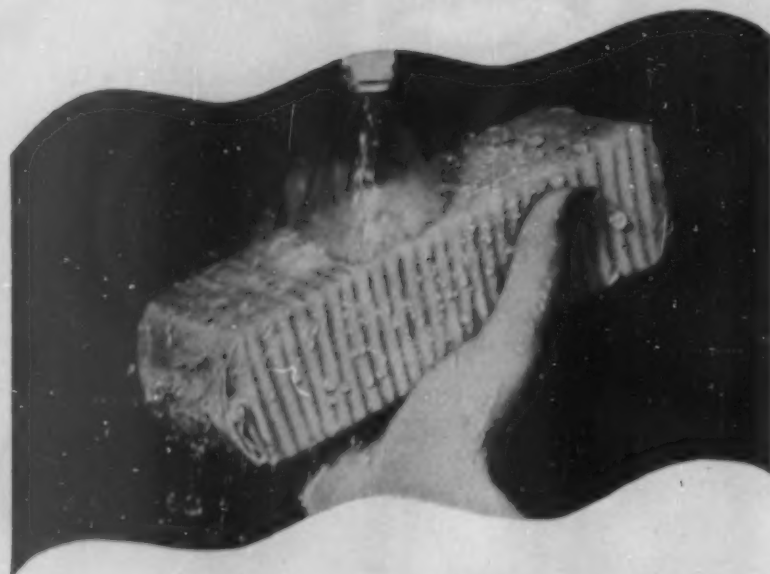


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squeak through in the next couple of weeks.

A House victory might spur Senate action on the companion bill of Sen. J. William Fulbright. The Senate Interstate Commerce Committee has finished hearings but has been in no hurry to get the bill out on the floor.

The Hoover Commission wants the government to get rid of at least 100 of its 288 war plants.

The commission's report this week on real property management doesn't specify which 100 plants should be sold or written off as a war expenditure. It calls for a plant-by-plant study by boards of industrial experts.

The report says most plants are in good condition but are badly managed. Defense Dept. maintains 249 plants; General Services Administration, 39. "Such division," says the Hoover report, "makes impossible effective management by either." Recommendation: Abolish the National Industrial Reserve Review Committee, give full control of the plants to the Defense Dept.

Acquisition cost of the plants was \$8.6-billion, plus \$3.9-billion in machine tools permanently installed and another \$2.1-billion in other tools.

Congress is taking another look at spending in political campaigns, but nothing is likely to come of it—this year, at least.

A Senate Rules subcommittee proposes these limits on election spending:

- In Presidential campaigns each national party committee could spend 20¢ per vote for the total ballots cast in any of the last three Presidential elections. As of now, this ceiling would be about \$12-million for each party. The present law, loosely written and difficult to administer effectively, says \$3-million.

- Senatorial candidates could spend 10¢ for each of the votes cast in the last Senatorial election in his state, with minimum of \$50,000. Present limits vary from \$10,000 to \$25,000.

- Candidates for the House could also spend 10¢ per vote cast in the last elections with assurance of at least \$12,500. Current limits range from \$2,500 to \$5,000.

- An individual's election contributions could not exceed \$10,000 overall. The law now forbids a gift in excess of \$5,000, but it sets no limit on the number of political committees to which an individual may contribute.

- Political committees would be forbidden to spend money in behalf of a candidate without his personal authorization. Ceilings would apply to any spending in his behalf.



IT TAKES MORE THAN A BULLDOG

TO MAKE A ***Mack***

Why does this youngster sport a Mack Bulldog on his toy truck? For the same reason that many drivers of other makes fasten the Mack Bulldog on their trucks.

A man can dream, can't he? It's natural to want the best; but neither the man nor the boy is fooling himself.

They both know that it takes lots more than a Bulldog to make a Mack.

Economy-minded truck owners know it too!



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ELECTRIC PERCOLATOR BY SUNBEAM

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living ————— starts with "tailor-made"

Western BRASS

Remember when a cook's idea of making good coffee called for dropping a raw egg into the hot pot to settle the grounds? Modern, automatic coffee makers are a far cry from those days and the fine coffee they turn out is only part of the appeal they have for the homemaker. Another part is the accent

rich, polished chrome adds to a table setting. Many manufacturers of products for the home have turned to Western copper or brass because of the fine finish they can apply to the better metal

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Staging a Diplomatic Drama

The curtain will rise this summer on the most decisive diplomatic drama since the historic conferences of World War II—Teheran, Yalta, Potsdam. The chiefs of state of the Big Four powers will face each other in the center of the world stage, in Geneva July 18, for the first time in a decade.

All eyes will be on the actors, and nobody will notice the stagehands—unless something goes wrong. The success of historic conferences, however, depends upon the tireless efficiency and hard work of a band of technicians. One veteran diplomat put it this way:

"A conference can break down for lack of pencils, and if Dulles ran out of doodling pads at a critical moment, history might be changed."

• **The Stage Setters**—For weeks in Washington, the State Dept.'s Office of International Conferences, which does the U.S. share of the stage setting, has been hard at work making tentative plans. But now that the date and place of the conference have been decided,

Harold Kissick, veteran foreign service officer who leads the conference managers, and his deputy, Richard S. Wheeler, can get down to serious business.

• **Site Maneuvers**—There were no great difficulties in picking a site for the meeting, although the usual maneuvering went on. The Russians wanted to meet in Vienna—so they would be in a better position to exploit the propaganda impact of the recent signing of the Austrian peace treaty. Our State Dept. was opposed and plugged for Lausanne, Switzerland. But that didn't suit the Russians because they have no consulate there to serve as a base of operations. Stockholm had been suggested, but the Swedes were cool to the idea. They feared the Big Four would squeeze too many well-heeled tourists out of the hotels. And so, finally, Geneva was suggested and agreed upon by all parties.

But the maneuvering over the place of this year's conference was nothing

compared with the complicated negotiations leading up to the Yalta meeting in 1945. No less than 67 top secret messages were exchanged among Pres. Roosevelt, Prime Minister Churchill, and Premier Stalin over a period of six months before Yalta was agreed upon as a rendezvous. In addition, there were hundreds of communications and personal negotiations among their underlings.

Deadlocks over matters of taste and protocol can develop among the strong-willed men who lead great powers that would seem petty to a lesser breed.

Churchill, for example, sent the following message to Roosevelt in October, 1944, when Stalin insisted on the Black Sea coast as a conference site: "U.J.'s [Uncle Joe's] doctors do not like him flying and I suppose there would be the same difficulties in Russian warships coming out of the Black Sea as of American and British warships coming in. One way would be for Turkey to declare war, which I expect she



BUT GAGES CAN TELL LIES! Some may not be sensitive enough to detect slight deviations from specified tolerances. Others may calibrate accurately only at the top and bottom of their scales. So, they pass work as OK when it actually isn't. That means costly filing, fitting, selecting and discarding in assembly operations . . . with expensive rework or salvage in addition. Only when you know your gages are right can you cut these costs.



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would be very willing to do. But I am not at all sure that the Russians would welcome this at the present juncture in view of what I told you about their wish for revision of the Treaty of Montreux."

Now that the Big Four has agreed on where "the summit" is to be, Kissick and his team can start the intricate job of getting the President and half a hundred important officials, with bodyguards and retainers, to the conference, through the conference, and back to their desks without incident.

• **Getting Delegates Off**—Just getting the delegation off intact and on time isn't simple. Kissick's people make sure that everyone has immunization shots, tickets, baggage checks and stickers, security clearance, the proper clothes, passes, passports, visas, badges, conference registration cards, credentials conferring the proper diplomatic powers on key officials, conference stationery, a copy of the rules of order for international conferences and committee meetings, identification cards, detailed information on the city and country where the conference is being held, and so on.

Then there's the responsibility of seeing to it that each delegate is supplied with a "document kit" on every subject with which he's likely to be dealing at the conference.

Wheeler says: "It's just like getting a hundred kids off to camp."

• **Finding Accommodations**—But getting the delegation off is less than half the job. The hardest part is the actual administration of the conference itself.

This can begin now that a date and a place are settled on. Kissick's office immediately informs the local U.S. embassy or consulate of the approximate size and composition of the U.S. delegation, and of any special eccentricities of the delegates. The embassy then gets busy scrounging accommodations for the party.

The scramble for accommodations isn't entirely a free-for-all. Once initial claims have been staked out, intricate negotiations may go on among the participating countries and the host country to assure that accommodations and other matters are settled to everybody's satisfaction. At the Geneva Conference last year, the U.S. got off to a slow start and other delegations grabbed up almost all of the available space. After lengthy international head-scratching, the Swiss offered Dulles and his staff a new modern hotel in the center of town. The U.S. accepted.

"This was all right," Wheeler recalls. "It was nice and clean with telephones in every bathroom. The only trouble was the floors were so thin we were afraid the document safes would drop through them, and the newsmen patrolled the lobbies and corridors so

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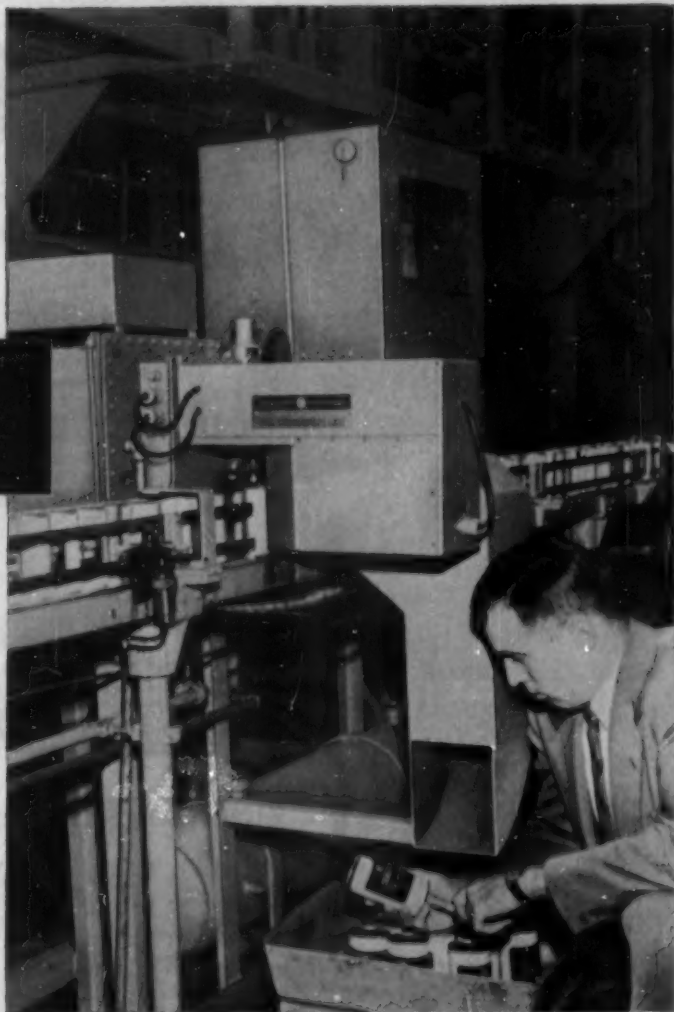


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There's no costly installation problem. HYTAFILL is compact ... readily adaptable to existing

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Liquid level checking is just one of many ways x-ray applied by General Electric serves industry. For an expert appraisal of your particular needs, call your G-E x-ray representative or write direct. X-Ray Department, General Electric Company, Milwaukee 1, Wisconsin. For facts on HYTAFILL, ask for Pub. AO64.



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effectively that every sneeze got into the papers."

Early in the game, Kissick's office will send a senior officer to the conference site to take charge of on-the-spot arrangements under the general authority of the local ambassador. He will negotiate with the embassy and the host government over such things as adequate communications with Washington, adequate security for the persons and papers of the delegation as well as for the conference sessions, seating arrangements at plenary and committee sessions, the order of speeches, membership and chairmanship of committees, duplication equipment, transportation for delegates, office supplies, messengers, secretaries, interpreters, and scores of other matters.

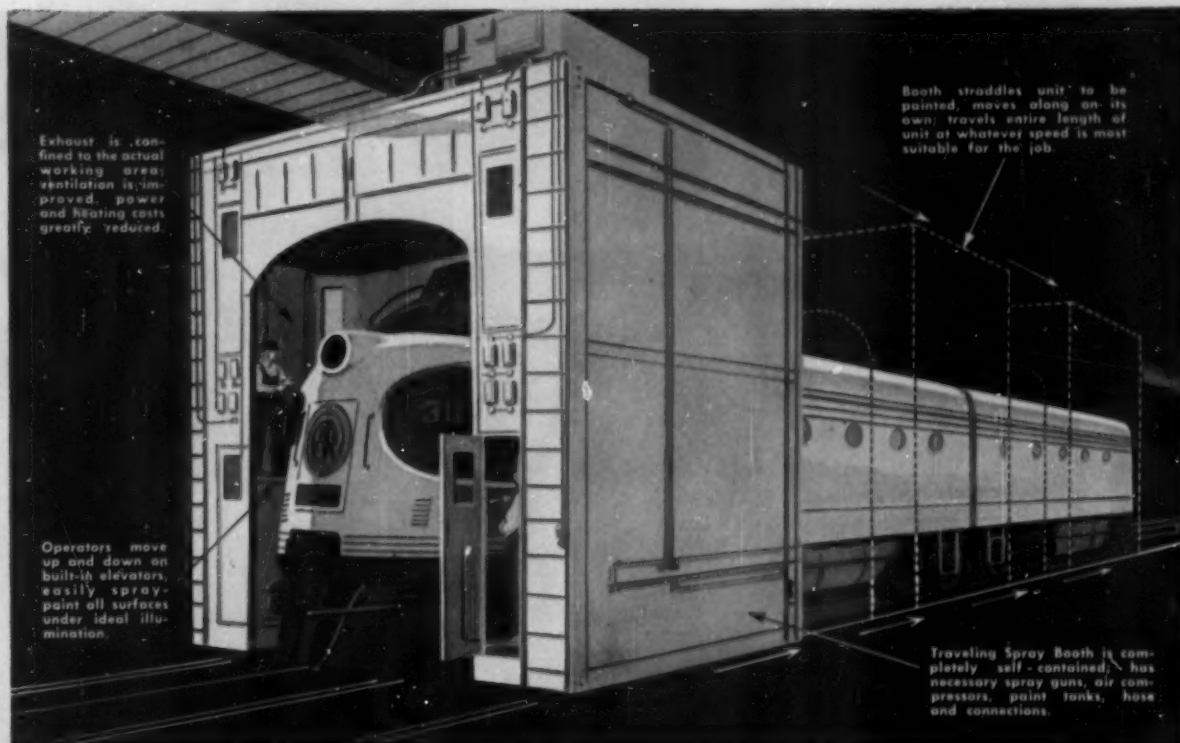
• **The Big Headache**—The size and composition of the delegation probably will be the biggest headache in all these preliminary arrangements—they will keep changing right up to the last minute. The American delegation to Yalta originally was set at 40 people, for instance, and ended with more than 100.

The bulk of the stage-managing at the conference will be routine—keeping the documentation flowing fast to the right people, keeping the pencils sharpened, the water carafes full, the messengers on their toes, the press off the delegates' toes, and so forth.

The staff work is only beginning when the diplomats retire. The day's proceedings have to be duplicated, summarized, recorded, translated and filed. The agenda and schedule for the following day must be settled. Kissick's men will work nearly around the clock and then expect to be routed out of bed at 4 a.m. by a delegate who's gotten into trouble with the police or by a news pundit who has to talk to the Secretary right away.

• **Protocol**—Entertainment and protocol also are part of the job. The conference staff will have to make sure that Eisenhower and Dulles see the people they must see and no others, that Mr. Molotov gets invited to the functions to which he should be invited, doesn't get invited to the ones he shouldn't be invited to, and shows up in the proper dress.

Protocol isn't so crucial as it used to be, of course. But the Russians, perhaps because they are new to world power, still are extremely touchy about it. No Russian official ever will seek to talk to an official of another power of lower rank than himself at a reception. The Russians always insist on Russian being an official language of any conference they attend whether anyone else there speaks it or not. And if Bulganin, through a fault in an invitation, showed up at a function in morning clothes and everyone else was



Traveling "beauty shop" for trains, planes, and buses

Ever wonder if there was a better way to paint a train, streetcar, or other large vehicle? DeVilbiss engineers did. Here's the mechanical marvel they came up with—the DeVilbiss Traveling Spray Booth!

LOCOMOTIVES used to be painted much the same way you'd paint a house—that is, with scaffolding and ladders which were moved up and down and around until the job was finished—a costly and time-consuming way.

Above, you'll see how the method has changed. The unique DeVilbiss Traveling Spray Booth straddles the locomotive (or any large conveyance, such as an airplane, boxcar, bus, or streetcar) to be painted. It moves along while painters, standing on built-in

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The Traveling Spray Booth is only one of hundreds of cost-saving and timesaving ideas DeVilbiss has to offer you if you use spray guns, spray booths, air compressors, hose, or hose connections. Call our nearest branch office, or write direct, to have a DeVilbiss engineer analyze your operations for the possibilities of saving you needless expenses.

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in slacks, the consequences might be serious.

• **Vodka Drinking**—One social problem that the conference staff hasn't licked is how to counter the frequent Russian practice of serving U.S. officials vodka while secretly filling their own vodka glasses with water. About all that can be done is to advise the Americans to down a few slugs of olive oil or cream before going to the party. At one conference an ad hoc solution was found. The American delegates were instructed to refuse to drink vodka unless the Russians would drink bourbon. The Yankees drank the Slavs under the table.

Fortunately for Kissick's men, the U.S. generally entertains very austere at conferences—so much so that many a foreign eyebrow is raised. One reception and a small informal dinner or two is the standard procedure.

"I can't imagine the circumstances which would make us throw a formal banquet," Wheeler says.

• **Congressional Stinginess**—The reason is Congress' stinginess and suspicion of striped pants high jinks. Kissick's Office of International Conferences gets an appropriation every year to cover U.S. costs for every conference in which we participate. The budget has averaged \$1-million in recent years, reached a high of \$4-million in 1947-48. This year Dulles asked for \$1.5-million to cover the expected boom in conference activity. But the House cut it back to \$1-million. Congress also has stipulated in recent years that no more than \$100,000 shall be spent in any one year for entertainment.

Despite tight Congressional strings on his purse, Kissick managed to finance U.S. participation in more than 300 conferences last year. He estimates that conferences cost his office on the average about \$1,000 per U.S. delegate sent abroad. The tab is much higher, of course, when the U.S. is the host.

• **Postwar Boom**—The boom in the conference business is a postwar phenomenon. In fact, Kissick's outfit, which manages U.S. conference participation for all agencies of the government, was set up only in 1946.

The emergence of many specialized agencies in the U.S. accounts for much of the boom. But the root cause is the importance and complexity of modern international relations and the rise of the U.S. to a position of leadership in the free world.

"Before the war," Wheeler explains, "we did most of our negotiating bilaterally through the ambassadors. It would take years to get complex problems settled. Now we call a multilateral conference of a couple of dozen nations and clean up the whole business in a few days. We're really doing the job better now. We have to."

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under \$2000 and over \$6000, 16% and 10% less prevalent. Families earning over \$6000 are 28% less prevalent in Ind. than in Mich.-Ill.-Ohio.

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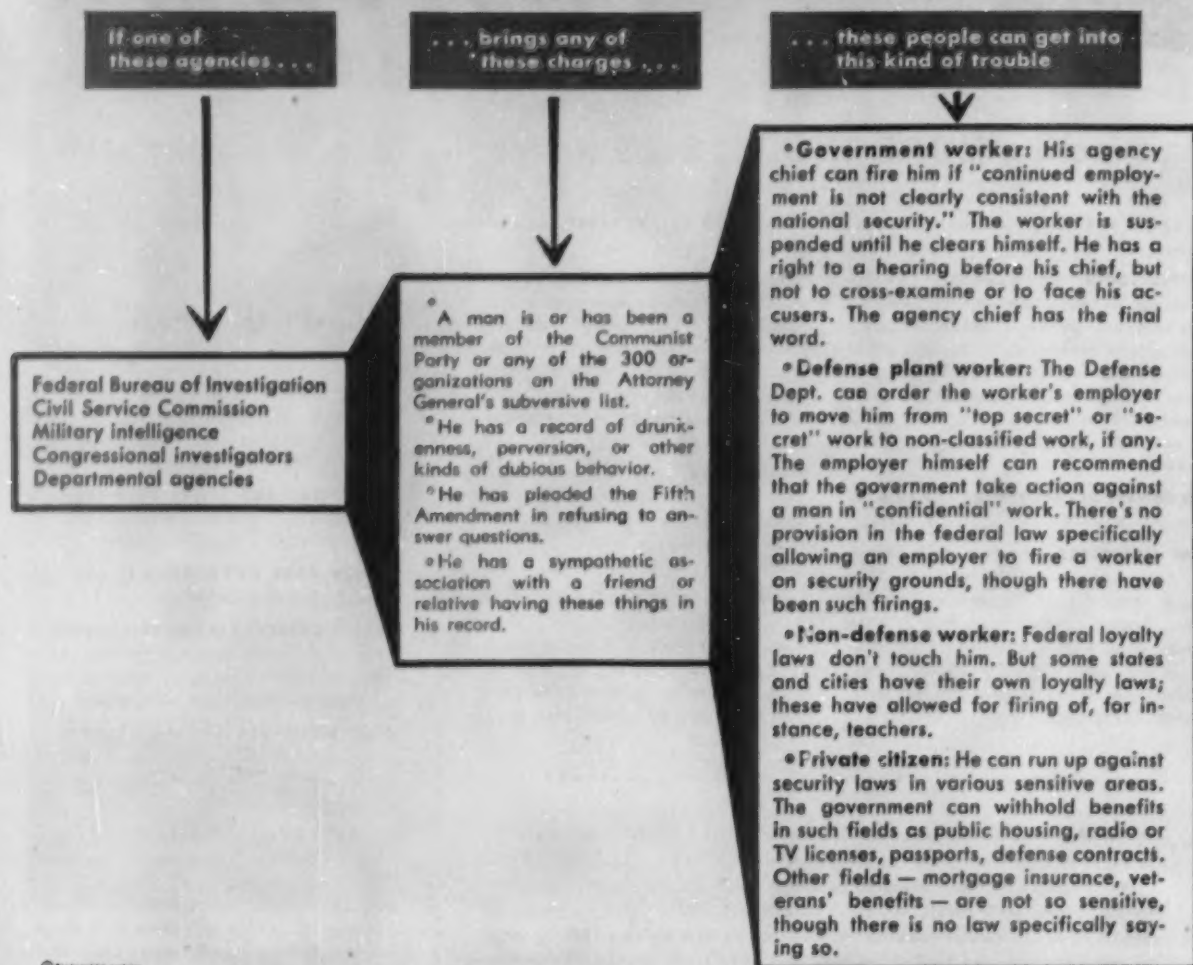


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The Machinery of Security



©BUSINESS WEEK

Security: The Setup Draws Fire

The system of laws and administrative machinery (table) designed to catch federal jobholders who may be dangerous or unreliable from the security standpoint (the so-called security risks) — and to deny various government benefits to other persons in the same category — is being buffeted by a rising wave of attacks.

There's no sign, of course, that the Administration — or the Democratic Congress, either — wants to ease up on Communists, whether in or out of government. Spies and the actively disloyal are not finding new supporters.

But there is a slowly growing block of challenges to the authority asserted by the government in the confusing area where the government's right to se-

curity conflicts with the civil rights of the private citizen — some of them written into the Constitution.

Here's what's happening:

- The Supreme Court last week, in a 7-2 decision, held that Yale Prof. John P. Peters was illegally fired from his post as adviser to the U.S. Public Health Service by the Truman Loyalty Review Board after twice being cleared. The board, says the court, had no right to reopen the case itself.

- A Senate Government Operations Subcommittee of four Democrats and three Republicans voted unanimously to set up a high-level commission to review the entire federal security program.

- Former Republican Sen. Harry

P. Cain, of Washington, now a member of the Subversive Activities Control Board, climaxed a six-month attack on the federal loyalty program with an appeal to Congress to overhaul the entire operation.

- Unions and civil rights proponents challenged Defense Dept. plant security experts in a daylong debate in Washington.

- The Supreme Court, in another recent case, threw out contempt convictions of three defendants who used the Fifth Amendment before Congressional committees.

- A District Court judge reversed a State Dept. decision to withhold a passport from an alleged security risk ... and the State Dept. granted the

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WHEN it was new, this machine tool cost many times the original cost of the revolver. But since then their respective values have been moving in opposite directions. The gun is now a collector's item . . . the machine tool a scrap dealer's delight.

The reason for this is obvious. Somewhere along the years the revolver was replaced by a newer, more efficient model and graduated to a gun fancier's collection. The machine tool, on the other hand, was required to limp along to its last dying gasp. It's hard to understand the philosophy behind this. Particularly since it increases production costs and, inevitably, competitive selling prices.

Lees-Bradner suggests you take a long, hard look at your present hobbing and threading equipment. Is it "over the hill" and too expensive to keep?

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man—executor of Albert Einstein's estate—the passport he had been seeking for more than two years.

1. The Cain Campaign

Former Sen. Cain has become the government's severest and most voluble critic. In the Senate, he was identified with the GOP's extreme right wing—a man who competed with McCarthy in McCarthy's own field. Cain is now a member of the five-man Subversive Board that processed Justice Dept. charges of subversion against the Communist Party and front organizations and has charge of the first legal restrictions on organizations on the Attorney General's subversive list.

Cain told a Senate Civil Service Subcommittee in a two-hour session that the entire Administration program is "totalitarian." His main target is the list of organizations labeled as subversive by the Attorney General—a list that now includes some 300 groups and provides much of the substance in the security program.

• **Future, Not Past**—Actually, Cain would do away with the entire subversive list in screening federal job applicants. He says it should be enough for a prospective employee to take an oath to defend the U.S.—that his security status should depend on future behavior and not on past membership in organizations.

"If the answer to that oath is in the affirmative," Cain told a CBS television audience last week, "then I think it should be accepted without second-guessing a man's background, and that any violation of that oath is a responsibility primarily" of the FBI and other law enforcement agencies.

To condemn a man for past associations by an ex post facto law, making it criminal to have been a member of an organization that was not illegal at the time, is a violation of the spirit of the Constitution and "antagonistic to the common good," Cain declared.

• **"Wormy"**—According to Cain, the "warped and wormy measuring rod" of the subversive list contains at least 150 groups now defunct, and only 20 or 30 are active enough to be taken before the Subversive Board for a determination as to whether they are actually Communist fronts. If the board agrees a group is a front, it is required to register with the Justice Dept. So far, court tests of the legality of this procedure have stalled its operation; up to now, not a single organization has actually been compelled to register.

Nevertheless, mere membership in such an organization, no matter how long past and detached the relationship, threatens the government or defense employee with loss of his job.

Members of some of these organiza-



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tions in past years frequently included liberal and intelligent people interested in civil rights, says Cain; in fact, he says eight or 10 congressmen might well be challenged as past members.

Cain says his criticism is the result of his two-year experience on the Subversive Board.

II. The GOP Program

The Eisenhower Administration's security programs involve separate checks for government employees, defense workers, and the atomic energy system. Basically, all follow the same criteria for security checks of employees, through use of the Attorney General's subversive list, information supplied by federal agents, accusations by associates or others, and the like.

When charges are brought, many are given a chance to quit. Otherwise, there is a hearing before a three-member panel of government employees—from some other agency. This panel advises the department head, who has the final authority to clear the employee or fire him. There's no appeal.

This is a simpler setup than the Truman loyalty program. Truman created a court-like system with appeals from an agency board, made up of its own employees, to an appeals board that was, in effect, a court of last resort for all government employees accused on disloyalty or security risk charges.

The record so far shows the Eisenhower-ordered security recheck of all federal employees is now about complete, with only 5,000 cases left to be reviewed out of 2.3-million workers. Some 2,000 cases turned up derogatory information.

• **Defense Plants**—Workers on secret and top secret projects in defense plants must be cleared by the Defense Dept.'s security force (table, page 84). Employees on projects classified as confidential—the least sensitive classification—can be cleared by the employer. Defense officials only direct the removal of a man from classified projects; they won't take responsibility for ordering a man fired.

If an employer wants to dismiss a worker on security charges, he has to do so at his own risk. One risk: possible court charges of defamation of character or slander. In some cases, the union will take the case of a man who has been fired.

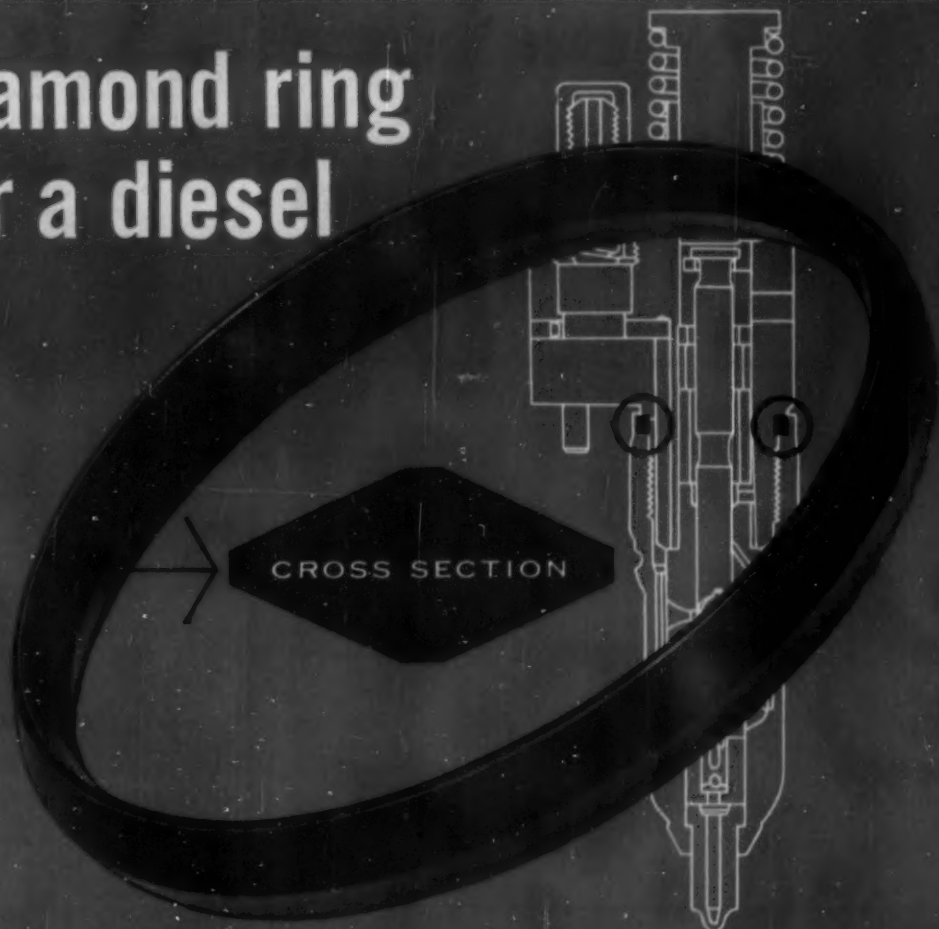
Some 3-million defense workers have been screened, with about 1,000 positive cases of security risk turned up.

III. Recent Changes

While defending their system, Eisenhower officials have altered their rules recently.

• The Pentagon has set up a cen-

Diamond ring for a diesel



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tral review board for all cases challenged by defense workers, and has made a point of trying to give the accused a complete set of charges.

• **Atty. Gen. Brownell** has put into effect seven refinements in the government employee security system—emphasizing a review of security personnel in the various departments, producing accusers where it won't hurt national security, and "meticulous care" in suspensions.

While not conceding that these changes were the result of unsatisfactory operations, both departments acted in areas that have been the target of critics.

• **To Relax**—Subversive Control Board member Cain would go a lot further. He would provide for: an end to mandatory suspension of workers before a hearing; paying counsel expenses for the accused out of government funds; granting hearings to job applicants facing derogatory information.

• **To Tighten**—Not all the proposed changes are in this direction, however.

Currently, the Defense Dept. is backing a Defense Facilities Production Act in Congress to extend its subversive program to any plant that would be involved in emergency production. Theoretically, this would make most industrial employees subject to security checks.

The bill passed the Senate in the waning days of the last session but failed to clear the House. It has little chance now, despite pleas by Defense security teams that known subversives are working in industries outside department jurisdiction in positions where they could raise havoc in an emergency.

Atty. Gen. Brownell announces he's prepared to take 30 organizations now on his subversive list to the Subversive Board for a ruling that they must register as Communist-front organizations. Up to now Brownell has brought 14 organizations to the board. Of the front groups, only two—Labor Youth League and International Workers Order, Inc.—have been through the mill and received board orders to register as Communist fronts under the 1950 Subversive Activities Control Act. But legal appeals have blocked the orders.

• **In Reverse**—Brownell took a small step the other way when he withdrew a petition to have the Joint Anti-Fascist Refugee Committee declared a Communist-front group. Brownell explained that the committee had been dissolved some time before—but noted that in other cases, past or future, dissolution of a front would not necessarily be grounds for dismissal of a case.

IV. Labor and Management

The hottest clash in the recent volley of attacks came a couple of weeks ago when labor and civil rights proponents

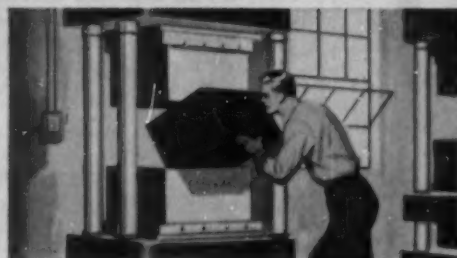
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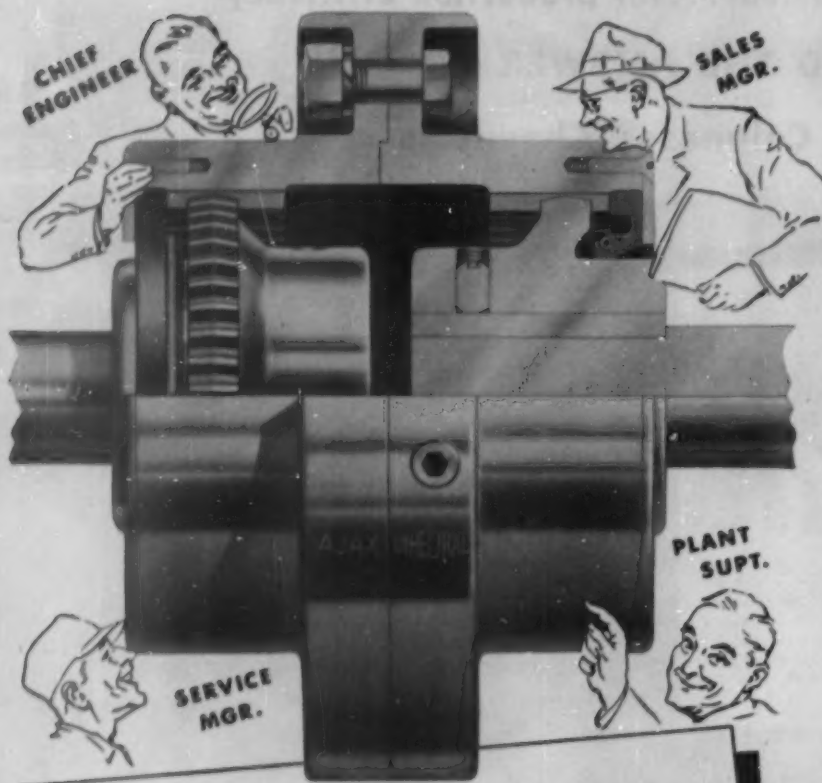
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in, foreign matter out,—maintenance men welcome THAT! Assembly and installation costs are cut to minutes instead of hours, and everybody welcomes THAT!

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DIHEDRAL COUPLINGS

charged federal and management officials with injustices to defense workers, and Defense Dept. men fired back.

The critics attributed the trouble mainly to the overzealousness of security officers in defense plants, either government men or those employed by the plant itself. But they also blamed the security rules—the lack of right of the accused to confront the accuser; the failure to make a distinction between a possible enemy agent and someone with a blot on his record through associations or bad behavior.

• **Reply**—Two Defense Dept. officials—John Fanning, director of industrial relations, and Robert Applegate, chief of industrial security—defended the present security systems, charging that many of the attacks came from professional critics. Both made a sharp distinction between a loyalty and security risk—describing the latter as anyone who should not be working on a defense project for any reason, even “an epileptic working on sensitive equipment.”

In the Defense Dept. view, it is necessary to remove any security risk from defense work—and even from defense-associated work.

• **Disclaimer**—These officials disclaimed any intention of making a security check on all industrial workers, if the department's bill went through Congress. They said they are only after the “hard core” Communists—and, anyway, an over-all security review would be prohibitive in cost.

A management security official, Wilson McMakin, director of industrial relations of American Cable & Radio Corp. backed the Defense Dept. in this, saying the responsibility is mainly management's. He proposed cooperation with unions, and cited a contract with the International Union of Electrical Workers (CIO) that spells out ways of handling subversives.

• **Challenge**—Both labor and management were challenged by Adam Yarmolinsky, a Washington attorney who studied industrial security cases for the Ford Foundation-backed Fund for the Republic. He claimed management and unions actually take little interest in workers charged with subversion, but let them fight their own battle.

V. Congress and Courts

A new commission to review the whole federal security program is a real possibility now. The Senate Government Operations Subcommittee headed by Hubert H. Humphrey (D-Minn.) approved the measure unanimously.

The bill would establish a 12-member commission, representing the Administration, Congress, and the public, to work out a single security system for federal and defense workers.

The Administration sees this idea as a condemnation of the present setup; but may be unable to stop the move.

• **Major Role**—The hand of the courts—of necessity slow—is beginning to be felt in the security struggle. Ultimately, the courts will play a major role in resolving the current debate over the relative claims of security and the basic freedoms of the Constitution.

The courts are not apt to take quick or drastic action. The handling of the Peters case by the Supreme Court shows this.

The court did not rule on the issue many people—including at least three members of the court itself—hoped it would tackle. That issue is whether government employees can, in loyalty proceedings, have under the Constitution the right to confront and cross-examine their secret accusers.

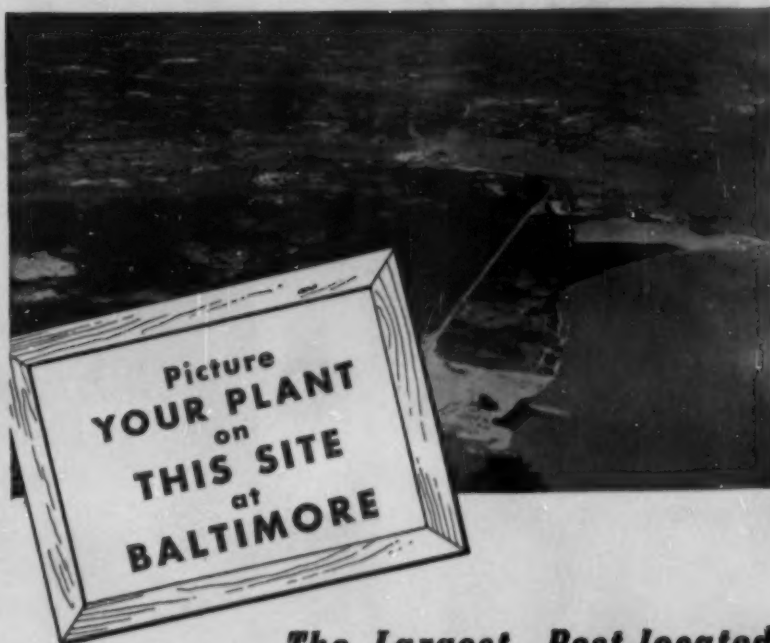
But you see the influence the courts do have in the Supreme Court decisions just a few weeks ago in the so-called "Fifth Amendment" cases. Chief Justice Warren, while not actually changing existing law, reversed three contempt-of-Congress convictions by re-affirming the Fifth Amendment's protection against self-incrimination.

• **Varied Pace**—Generally it takes years for a Supreme Court test of a basic statute. And much of the legislation on the Communist threat involves very special legal problems that prolong litigation.

Thus, the first constitutional challenge of the 1950 Subversive Activities Control Act is only now before the Supreme Court. The court has accepted for argument next fall an appeal by the Communist Party of America, the first organization ordered to register as a Communist-action group by the Subversive Activities Control Board. At stake is the whole program of registering and controlling Communist-action and Communist-front organizations.

By contrast, the 1954 "immunity statute"—permitting the government to compel witnesses to testify in espionage cases by granting immunity from prosecution—will get a quick test. The Supreme Court agreed last week to hear next fall a challenge of the law by William Ludwig Ullman, former Treasury Dept. official in the Truman Administration accused by ex-Communist Elizabeth Bentley as a wartime Soviet spy.

No such quick test is foreseen for the sweeping Communist Control Act of 1954 (BW—Aug. 28 '54, p. 27), the most ambitious of the anti-Communist measures. It provides for the breakup of Communist-dominated labor unions and imposes criminal penalties for membership in the Communist Party. No proceeding under the act has even been started, so a court test is probably years away.



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REGIONS



DUST BOWL FARMERS this week were plowing under what was left of the Oklahoma Panhandle's winter wheat crop (above) to make way for summer's sorghum and corn. The land is still dry, but May's drought-breaking rains have brought the brightest outlook in five years to much of the Southwest, and its farmers and merchants. They're saying this might be the end of the dry cycle and good years might lie ahead for a while. But the verdict on whether the dry spell is really over hangs on rain-fall through the next few months.

New Season, New

DOWNPOUR FLOODED farmer W. E. Holland's yard, stood 3½ inches deep in living room. "It was worth it if it makes a crop," says Holland.





Hope for Dust Bowl

(Story continues on page 96)



FARMER HOLLAND, like others, had to take outside job to break even.



FARMER JAMES THARP spent \$10,000 for new irrigation system.



MERCHANT R. W. VARNEY hopes for pickup, but he'll sell at first chance.

an uncommon
cargo...



We lost a nice piece of business the other day.

Friend of ours is importing three giraffes, and he asked us to barge them upriver from New Orleans. You're common carriers, aren't you? he said.

That's right, we said, but we don't have a giraffe tariff.

You need a giraffe tariff, he said. What better way could you demonstrate that long-necked shipments travel best by barge? No low-bridge problems—get it?

Besides, he said, giraffes are delicate, and barge shipments travel smooth.

Furthermore, he said, barge rates are cheapest; and after a man pays for three giraffes, he has to watch every penny.

Since he put it like that, we said we'd go along—but it didn't work out. Complicated business, importing giraffes. So we lost the movement.

If you want to ship giraffes, then, we can't accommodate you—but for any inanimate freight... long-necked or not... barge-load, carload, less-than-carload... Federal Barge is your best transportation buy.



A PRIVATELY OWNED CORPORATION



DUST still blows over Guymon, Okla., but this time families are staying put.

Dust Bowl's Hopes

(Story starts on page 94)

In the Dust Bowl last week, it was different.

For five years, farmers had made their grim jokes about drought, had sown their seed with half-hopes, and reaped their harvest—what there was of it—with resignation. Each spring, the prospects had been the same: wind, dust, not enough water.

But last week, in the panhandles of Texas and Oklahoma, and in the counties that back up from where the southern corners of Kansas and Colorado meet, rain—drenching, pounding rain—had come (BW—May 28 '55, p88). The drought, if not ended, had broken. Across the plains, there was a new optimism, and as farmers laid down their sorghum and maize there was talk of the best summer since 1950.

True, it was talk with crossed fingers. Dust still blew (picture above), and the May rains that poured 6 in. to 8 in. of water over wide sections of the Southwest came too late to save much winter wheat and did little more than get the ground in shape for planting. If the new crops are to weather through, more rain must fall this summer. Then, and only then, will there be any sure sign that this latest drought in the Southwest's centuries-old cycle of wet and dry years (BW—May 22 '54, p134) has come to an end.

At the moment, though, this much is agreed on: The outlook for much of the Dust Bowl is the best it's been in five years.

• **Hard, but Not Killing**—The past five

years have been hard years—hard for farmers and hard for tradespeople with stocks of goods to sell to them. But few people—few with any real memory of how it was—are ready to contend that the damage has been anything like that of the killing droughts of 1930-1939, when the Great Plains first came to be known as the Dust Bowl. In gathering its first-hand reporting from part of the drought area this year, BUSINESS WEEK again came away with the conclusion that conditions still aren't so bad as publicity makes them.

Around Guymon, in the Oklahoma Panhandle, only about 40% of the winter wheat acreage came through without serious damage this year. From October until May, there was no rain at all in Texas County, except for one small area north of Guymon. In 1954, freeze killed the wheat, in 1953 dust storms blew it out of the ground, and in 1952 it was a freeze again. Yet only two farmers pulled up stakes and moved away. And they were "foreigners"—men who had moved into the county during the war years' boom days.

"The farmers," says Texas County Agent Bob Sheets, "are in better shape now than they ever were in the 1930s. For one thing, they went into this drought in better shape. They had about eight years of good crops, and strong wheat and cattle prices, during and right after World War II. Many of them took the money they made and put it into farm machinery. Others socked it away in bonds or land. Most

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G-E 65-TON INDUSTRIAL LOCOMOTIVE AT GRANITE ROCK CO. HAULS 2000-TON LOADS OVER GRADES AROUND QUARRY AND ROCK YARD.

GRANITE ROCK CO. SAVES \$10,240 A YEAR

In single-shift operation, G-E 65-ton switcher gives almost 20% gross annual return on investment

"Our G-E switcher consumes less fuel oil in one week than our old steam locomotive burned in a day," says Lee Purtill, superintendent of Granite Rock Company's main plant and quarry at Logan, Calif.

Granite Rock, like hundreds of other companies, has discovered that a G-E *industrial* locomotive gives the best performance at the lowest cost. For example, Granite Rock reports that its daily operating costs have been reduced by 80% since it replaced its steamer with a 65-ton G-E diesel-electric. This saving, coupled with the low initial cost of the G-E industrial-type locomotive, provides a gross annual return of almost 26%—in single-shift operation.

"One of the reasons we bought a G-E switcher rather than some other make," says Mr. Purtill, "was

that G-E engineers made a very extensive survey of our needs. They recommended the standard 65-ton unit for our requirements and proved to us the dollars-and-cents savings it would provide."

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- ☐ **2. SELF-ENCLOSED PARTS**—All moving parts of the new Kidde system are self-enclosed to prevent fouling or accidental operation!
- ☐ **3. EASIER INSTALLATION**—New racking arrangement is pre-drilled at the factory, eliminates need for special hangers, tools or outside material! Can be either "free standing" or wall mount.
- ☐ **4. NO PARTS TO REPLACE**—Even after a fire, operating parts of the new Kidde system can be re-set with a screwdriver. No parts need be replaced. Refill cylinders and system is ready for operation!
- ☐ **5. SIMPLE, THOROUGH TESTING**—By merely disconnecting control heads from cylinders, all operating parts (other than actual discharge of CO₂ gas) can be tested in place!
- ☐ **6. QUICK VISUAL INSPECTION**—All primary actuating parts fitted with easy-to-read visual indicator. Shows at a glance if system is "set" or "released."
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- ☐ **9. NO OUTSIDE POWER NEEDED**—The new Kidde system is completely self-contained, has rate-of-temperature-rise detectors which give sure protection even in case of outside power failure!
- ☐ **10. AUXILIARY EQUIPMENT**—Also available for use with the new Kidde system are devices for turning power on or off, for opening or closing doors, windows, dampers, etc.

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people have had something to fall back on.

E. J. Crippin, the county agent at Liberal, Kan., says only the younger farmers who didn't have a backlog when the dry spell started are in really bad shape. But most of them have managed to get by with side jobs. A county agent in southeast Colorado, where only about 20% to 25% of the wheat crop will bring any cash this year, said there's "naturally" more credit, lower profits, and more penny watching. "But no one's moving out, and we have the best prospect for summer in five years. If we get four or five inches of rain, we'll make the row crops."

In Boise City, Okla., where cattle and wheat rank about evenly as the top crops, only about 40% of the wheat will get through harvest. The drop in cattle prices two years ago hurt even more. But even here, there's no evidence that people are moving away, and storekeepers' hopes are high on prospects that a nitrogen plant and a helium plant will be built near the city.

In Stratford, Tex., many of the farmers are irrigating wheat, and their fields look good. "Another five or 10 years, and they'll all be irrigating," is the talk one hears in town.

• **Weapons Against Drought**—What emerges from these spot reports is simply this: Though the drought—in terms of its dryness and its winds—may be just as bad as those of the 1930s, its effects have been nowhere near so severe. And the reasons for this are multiple—better soil methods, larger bank accounts, more assets to borrow on, and more help from outside.

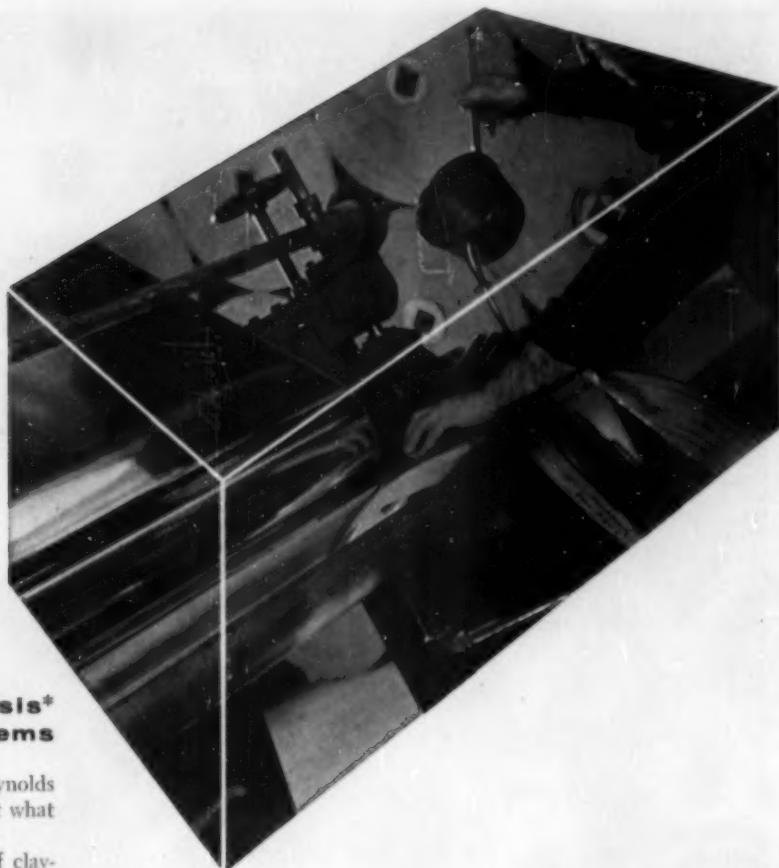
In Guymon, the First National Bank this year had about \$475,000 in loans and discounts; a year ago, its statement showed only \$263,000. Like other banks, the First National is not lending money on crops. But it is neither cracking down nor closing the door on loans for land and equipment.

First National's Pres. T. F. Wright says: "You've got to stay with people if they are trying. And these people are trying; nobody's running away. After all, people out here are used to drought. You have to be, if you want to farm around here."

Lance Brown, who manages the Farmers Home Administration office for Texas and Cimarron counties, feels the banks have gone about as far as anyone could expect them to go. "I don't know one in the whole area that has foreclosed on a rancher or farmer," he says.

The farmers who come to Brown are those who can't get credit, or additional credit, from the banks. Since last summer, he has O.K.'d \$64,000 in new emergency loans—for feed, seed, and living expenses—in Texas County,

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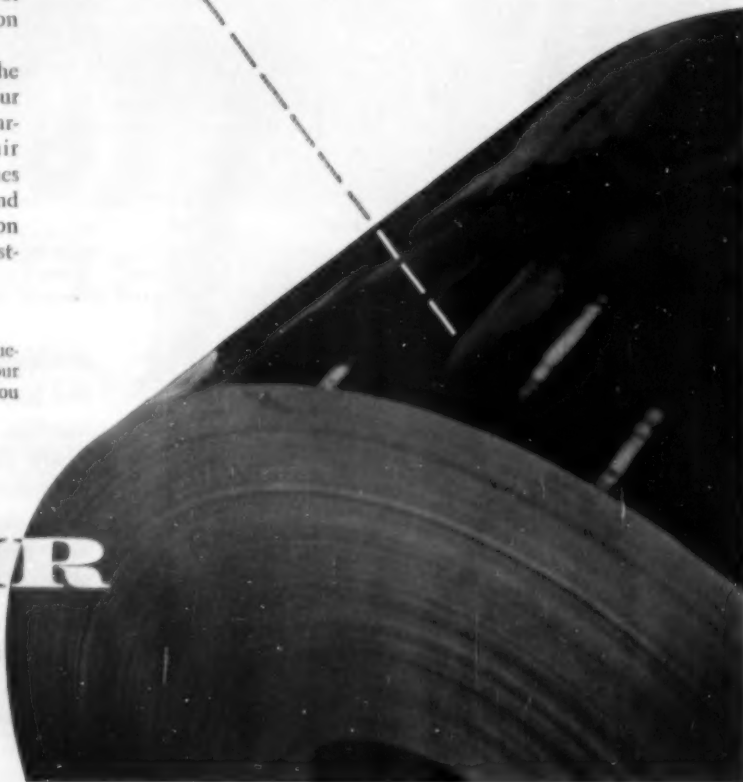


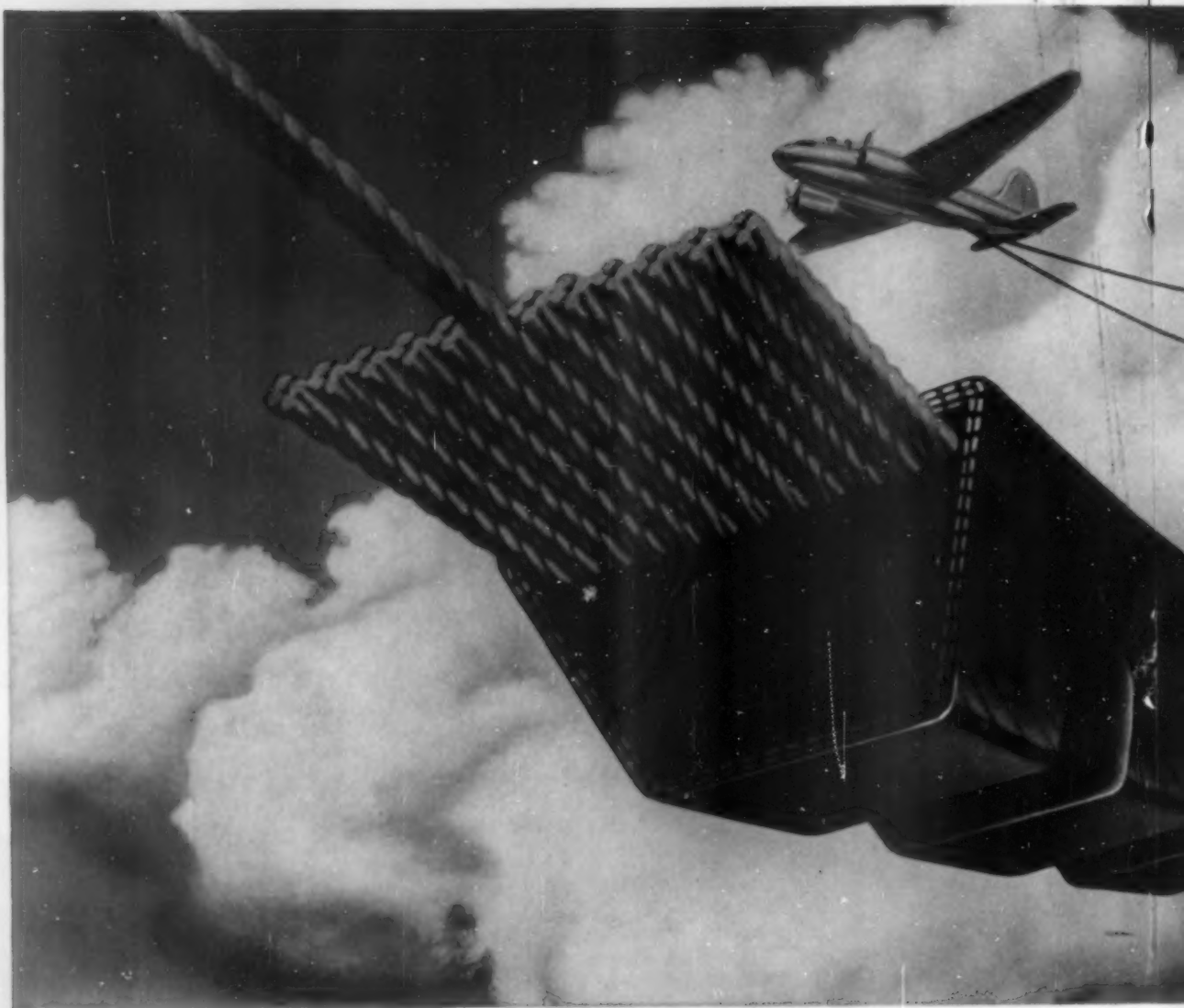
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A BELT FROM

Here's the inside story of how the thread-like lines that hauled troop-laden gliders fathered a great new V-belt. It begins with those drives where soaring shock loads resulted in premature stretching, breaking or other failures.

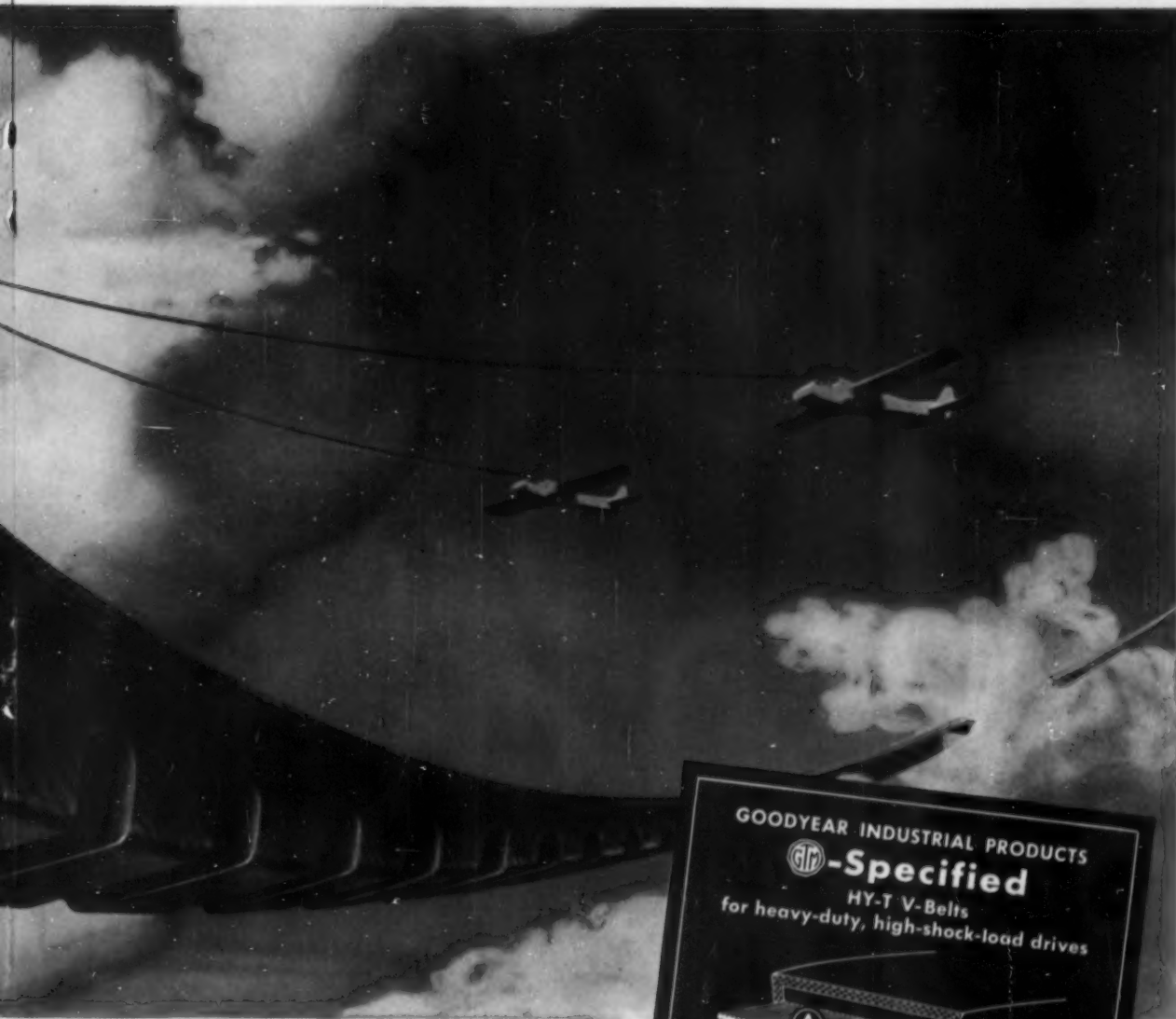
A new kind of belt was needed—one having great strength plus a built-in cushion to soak up the shock of peak loads without stretching. The G.T.M.—Goodyear Technical Man—undertook to build it, but soon found it was easier said than done.

Core of the problem was the load-carrying cords in a belt. The G.T.M. experimented with many kinds. Some had the strength. Others had the “give.” But none had the right combination. Suddenly he remembered the towlines on gliders. Certainly they had to be strong, lightweight,

flexible and shock-absorbent. What were they made of?

The answer was synthetic cord. But it was only a partial solution. All of the known “miracle fibers” were tested. There still was too much stretch. The complete answer came only after the G.T.M. developed an exclusive, triple-action tempering process, involving Tension, Temperature and Time that gave the cord of his choice maximum strength, yet removed the surplus stretch.

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and has approved another \$36,000 in additions to already outstanding loans. "In a good year," Brown says, "we'd have hardly any of this money out."

Despite the drought Brown gave money to four farmers last year who wanted to start their own farms in the county from scratch. And, on the incoming side, FHA collected \$143,000 on loans that it had out to 117 families.

The Federal Land Bank, a farm cooperative, figures it has about \$900,000 out in loans in Texas and Cimarron counties. But this is longer-term money—mainly 20-year loans—on machinery and land. A more immediate source of cash—to the tune of about \$230,000 so far this year—has been the Agricultural Stabilization Committee, a combined county-federal agency.

ASC has been paying farmers 50¢ to \$1 an acre to use dust-control methods on their fields. Last winter, with federal funds, it paid half the freight on hay that had to be shipped into the state for cattle feed. This spring, Washington channeled another \$350,000 into western Oklahoma's drought-hit counties as part of \$5-million in relief funds for the Dust Bowl. The cash is going to farmers for such things as emergency tillage.

• **Short, but Not Broke**—With the money they've had, the money they've borrowed, and the money they've collected from crop sales, crop insurance, aid payments, and sideline work, most farmers have managed to keep from sliding to a mere existence level. But, as any merchant will testify, they've held close what dollars they've had.

"Of course I've been hurt by the drought," says Charley Boston, Guymon furniture dealer. "Anyone who says he hasn't is lying. I'm doing about 75% of the business I'd do in a good crop year."

Other storekeepers are apparently telling the truth, since the almost uniform report is that sales have been running 15% to 35% below "normal" business. The hope, of course, is that the rains of May marked a definite turning point in the cycle, and that this summer will be the beginning of an improved income picture. "If the row crops make," says R. W. Varney, owner of the Firestone appliance store in Guymon, "we'll have a good Christmas. If they don't, things will be pretty bleak."

• **Some of the Answers**—No one who knows the Southwest would be brash enough to suggest that there is any single answer to its age-old cycle of famine and plenty—no one way to take advantage of the good years without bringing on the punishment the dry ones can inflict. But there are partial answers, and the fact that the punishment this time has been lighter is evidence that the farmers have found some of them.

Irrigation is one, and in the Pan-



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handle it seems to be the coming thing. In Texas County today, about 150 wells are bringing up water from the redbeds, a rock stratum about 400 ft. down. Jack Alexander, who owns the De Soto-Plymouth dealership in Guymon and also sells farm implements, says irrigation has made his business this year. Since January, he has drilled 35 wells for farmers, compared with 37 in all of last year. FHA alone has \$175,000 out on irrigation loans, a figure that breaks down to an average of about \$12,500 a well.

Most of the irrigation systems are for sorghum and maize. Although some farmers are using them for wheat, there's a widespread feeling that irrigating the grain crop is too risky a gamble. Too much can happen—freeze, hail, dust from other areas—during its long growing season to warrant the cost of digging water for it. And the water, of course, is not inexhaustible. The Southwest is already having to face up to the growing problem of how to recharge the reservoir (BW—May 7 '55, p. 134). Oklahoma's Gov. Raymond Gary says Texas County's water table dropped three feet in the last year, and that "we will have to learn water conservation, too." Gary will push for an overhaul of the state's water and soil conservation laws again in the next session of the legislature.

Apart from irrigation, better land care has made a difference. "Most of the farmers out here have learned to farm for drought years," County Agent Bob Sheets says. "In other words, they plant cover crops, such as grasses and clover and strip farm—plant seven strips to the quarter acre and leave the land between the strips fallow—to keep the soil from blowing." Chiseling and listing—plowing deep to damper soil underneath—is being used for emergency wind tillage, too. The Agricultural Stabilization Committee is paying farmers about half the cost of this erosion control.

• **Back to Nature**—The fact remains, though, that a lot of the land that has been blowing should never have been plowed up. This is the Dust Bowl's basic problem: As long as it's farmed, its erosion is not likely to be controlled. The remedy—severe as it is—is probably to return to permanent grassland some 8-million to 9-million acres that aren't suited for cultivation.

The drought-control meeting that officials from 12 states had with Agriculture Secy. Ezra Taft Benson in Denver early this month seemed to be thinking along these lines. Along with a program that recommended revision of the crop insurance system and easier credit terms, there was general agreement on the need for putting marginal lands back into grass with some kind of assistance from the federal government.



Test for tensile strength tells an important hose line story

This 10,000-lb. tensile tester stretches an Aeroquip hose assembly to determine the holding ability of the "little gem" fittings. These unique fittings grip the reinforcing braid without compressing the hose inner tube. Tests like this help to develop industry's highest quality hose lines.

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Robert B. Anderson gave up the relative peace of Texas oil and cattle for the political hurly-burly of Washington. As Deputy Secretary of Defense, he's doing a job but . . .

Keeping Out of Headlines

Robert B. Anderson (cover), the U. S. Deputy Secretary of Defense, is a little-known 45-year-old Texas Democrat who is becoming a big man in the Republican Administration.

In the past 27 months—first as Secretary of the Navy, then in his present post since last spring—Anderson unobtrusively has established himself as one of the most widely regarded of Pres. Eisenhower's businessmen in government.

While Defense Secy. Charles Wilson has been beset by kennel dogs and General Motors stock, Army Secy. Robert Stevens by Sen. Joseph McCarthy, and Air Force Secy. Harold Talbott

by A-bomb stockpiles in Spain, Anderson has managed to stay out of the headlines. He has made his mark in Washington as a quiet, efficient operator who never puts his foot in his mouth. And he has impressed people, especially the President, with his sharp intellect and abounding energy.

In recent months, Anderson has emerged as the man behind the scenes at the Pentagon—making key decisions, and pulling more and more strings in the military establishment. One Pentagon veteran explains Anderson's relative obscurity by the fact that "so many things that would be 'issues' don't develop because Anderson handles them

so quickly and intelligently. It's when you're in bankruptcy and get a receiver that you make the headlines."

I. Political Education

Anderson has had a political education that Eisenhower's other Defense Dept. appointees lack. That's probably the key to his success in Washington. Before his Navy appointment, he already was at home in both the rough-and-tumble of precinct politics and the normal operations of government.

At 22, while still a senior at the University of Texas Law School, Anderson was elected to the state legislature. The following year, he was named assistant attorney general of Texas. Other big state jobs followed: tax commissioner and chairman of the state's unemployment commission (he wrote Texas' first Social Security law). Later, he was appointed deputy board chairman of the Federal Reserve Bank in Dallas, and elected chairman of the Texas State Board of Education.

But Anderson basically is a businessman. For 16 years, he was connected with the Waggoner estate, a massive oil-cattle-farming empire in north-central Texas valued at about \$300-million. In 1941, he became its \$60,000-a-year general manager.

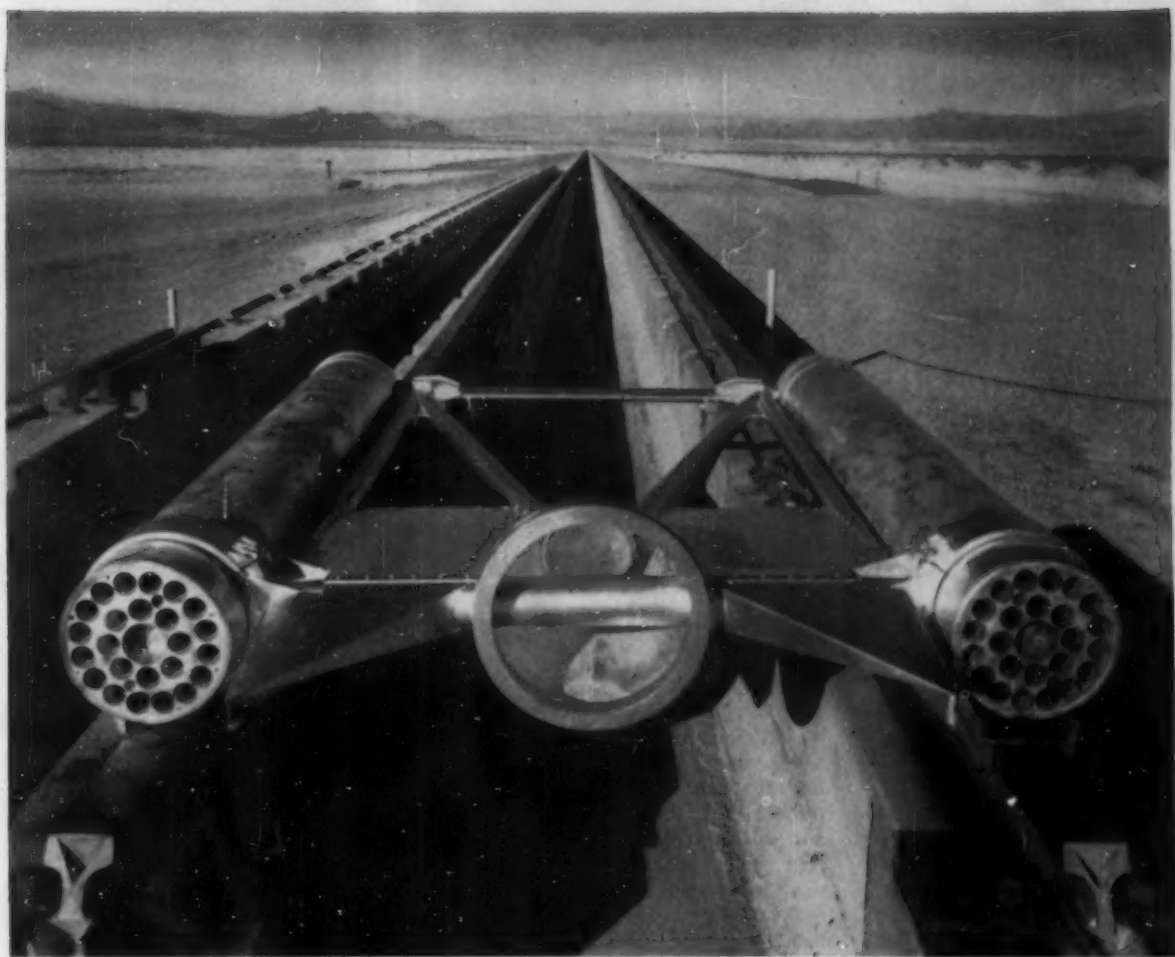
• **Eisenhower Backer**—During the 1952 election campaign, Anderson, a Democrat, was considered by many to be the brains behind the Citizens for Eisenhower organization in Texas. Like many other Texas oilmen, Anderson ditched Adlai Stevenson because of the Tidelands oil issue.

The story goes that after the election, Eisenhower asked Gov. Allan Shivers for the names of outstanding Texans who could be considered for high posts in the new Administration. Shivers listed Anderson first. As a result, Anderson was named Secretary of the Navy after Eisenhower's return from Korea.

• **Navy Record**—As Secretary of the Navy, insiders say, Anderson wrested control of the department away from the admirals. Civilian control of the Navy had been firmly established by the late Secy. James V. Forrestal, then diminished rapidly under John L. Sullivan and Francis P. Matthews. Anderson's predecessor, Dan A. Kimball, made some progress in regaining the helm. But as one civilian official says, "Anderson restored the right balance." This is what he did:

• He made the Chief of Naval Operations responsible to Anderson himself, not to the chairman of the Joint Chiefs of Staff, as had been the case.

• He ordered the chiefs of the seven Naval bureaus to report to him on all matters. Previously, the bureau



They fly this track at 2100 mph

Except for the absence of cross-ties it looks just like a very neatly aligned standard-gage railroad track. But no trains ever use it. The traffic it carries flies rather than rolls, moving over the 4.1-mile-long track not on wheels but on runners. Speeds are as high as 2100 miles an hour — roughly three times the speed of sound.

It's the Supersonic Naval Ordnance Research Track, called Snort for short, located in a flat stretch of California desert country. Snort, strictly a product of the jet-propelled, guided-missile, supersonic age, is used for captive-flight testing at extreme speeds of devices used in national defense.

The device to be tested is mounted on a jet-propelled carriage, riding on metal

shoes. Acceleration, velocity, trajectory and the like are measured by means of a vast array of precision instruments, including streak cameras. An ingenious water brake begins slowing down the test flights from their supersonic speeds as far as two miles ahead of the end of the line. Among the many items already tested are projectiles, rockets, guided missiles, and model and full-scale airplanes and their components.

As would be expected, building to meet the speeds and stresses to which this test track is subjected called for the strength and ruggedness of steel. The steel rails, unusually large and heavy, were rolled on Bethlehem Steel mills. Bethlehem's West Coast subsidiary, Bethlehem Pacific Coast Steel Corpora-

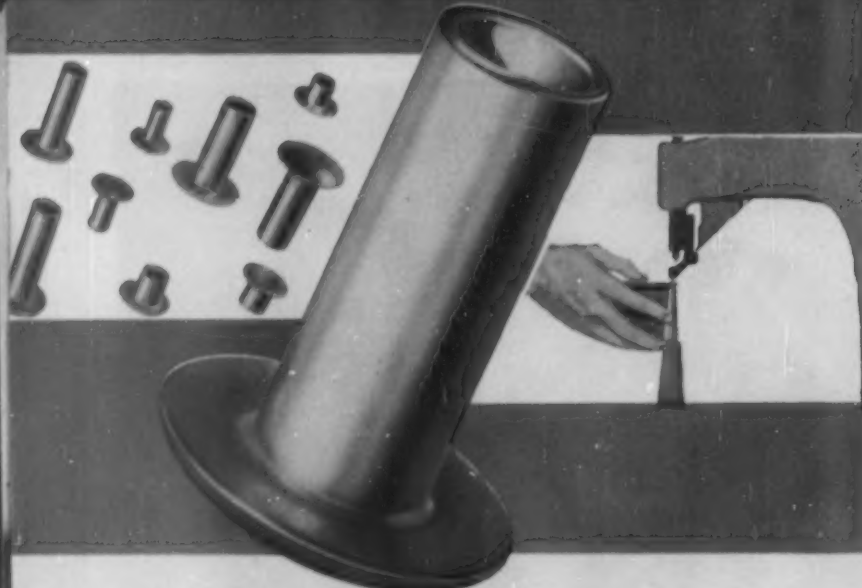
tion, supplied the special steel rail-anchoring units, also the steel reinforcing bars for the concrete foundations which support the track for its entire length.



Slowed down by ingenious water brake, rocket-propelled test carriage nears end of Snort track.

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As a Texas Democrat, he promoted the Citizens for Eisenhower organization.

ANDERSON starts on p 106

admirals had two masters; they were subordinate to the civilian Secretary on matters of management and performance and to the CNO on requirements.

- Over CNO's violent objections, he set up an analysis office, headed by a civilian, which reports directly to the Secretary and is outside CNO's chain of command. This office keeps tabs on materials, manpower, facilities, and program performance for the Secretary.

- He named two more Assistant Secretaries—one to act as comptroller, the other to be in charge of manpower matters—and gave district Naval commandants more authority over local management problems.

- He clarified the status of the Marines by making the Marine commandant responsible to the civilian Secretary rather than to the CNO.

- **Running a Business**—On the business side, Anderson put the Navy's industrial facilities on a corporate-like basis by applying the working capital principle to most of the installations. Such a plan had been proposed before, but had never got off the ground.

Shipyard and ordnance plant managers were given a revolving fund with which to finance all production costs. Costs were charged to work in process. Finished goods then were "sold" to the Navy or other military agencies at unit costs calculated to return money to the working capital fund. The Military Sea Transportation Service also was put on the same basis. Up to that time, Navy industrial plants were financed by allotment of funds from Congressional appropriations. The new setup resulted in better cost controls, more cost-consciousness on the part of installation managers.

Another of Anderson's projects was

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This stacker, which is the largest in use today, is approximately 300 feet long and rises 80 feet in the air. Up to 30,000 cords can be stored by the stacker. Additional chain, belt, drag, screw and apron conveyors automatically perform such functions as: removing chips from storage bins, carrying chips to digester, and conveying bark to storage or boiler house. Even coal from railroad cars is carried on conveyors to the crusher and then automatically distributed to the boilers.

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As Secretary of the Navy, he wrested control of department from the admirals.

ANDERSON starts on p. 106

cession made few people unhappy at the Pentagon. Kyes is brusque and abrupt, and seems to court the reputation of being the hard-boiled type.

Anderson, in contrast, is soft-spoken, never pounds the desk the way Kyes did, rarely shows anger. But officials who have worked with both of them say that Anderson can be every bit as tough as Kyes. "But it's a smoother kind of toughness," says one.

It's a fact, however, that Kyes had a tougher task when he came to the Pentagon. His first assignment was a hatchet job—to take the first hard look at a military budget that had mushroomed during Korea, then to hack out the fat. In doing this, he stepped on plenty of toes.

Anderson, on the other hand, found all this dirty work behind him. Besides, as former Secretary of the Navy, he already knew his way around Washington and the Pentagon.

III. Scope—and Pressures

You get an idea of the scope and tremendous pressures of Anderson's job by looking at some of the problems now facing the Defense Dept.

Foreign affairs: In Formosa, the Air Force and Navy say we should defend Quemoy and Matsu; the Army recommends against it. In Vietnam, political chaos has made the U. S. task of whipping up an effective native army almost impossible. In Austria, the pending peace treaty leaves the disposition of U.S. troops there up in the air. The Pentagon has to decide which ally should have priority in U.S. military help.

Mobilization: The Administration has switched from a policy of building up

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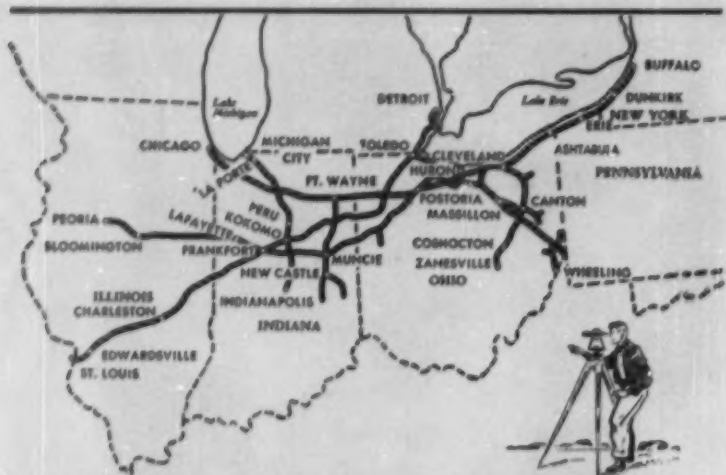
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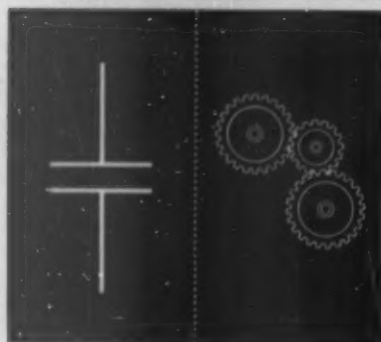
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As Deputy Secretary of Defense, he sets policy on many Pentagon problems.

ANDERSON starts on p. 106

for a crash date—a specific year of maximum danger—to one of maintaining a strong military position over an indefinite period. But here, you have to decide on some cutoff point where you freeze design, start production—and hope you're not shooting the works on a weapon that will soon be obsolete.

Manpower: The Pentagon would like to strengthen reserve forces. But it must reconcile the factors of equity—requiring everyone to serve in uniform—with (1) limits on the size of a force it can maintain, and (2) private industry's own technical manpower needs.

• **Policy Setter**—Anderson is closely involved with all these problems. Although he was the only one of Eisenhower's top-level Pentagon appointees without manufacturing experience, he has helped crystallize some important Pentagon policy on this subject.

He played a big role in settling a policy squabble that Wilson and Kyes had developed with the Office of Defense Mobilization—the celebrated issue of a broad vs. narrow mobilization base. The Wilson-Kyes team favored the narrow base as a less costly approach to arms buying. According to most observers, this led to a new emphasis on single-source suppliers. Anderson took the stand that the higher costs of keeping more defense companies in production at a slow rate were offset by the strategic gains. Last December, the Pentagon issued a directive "clarifying" Defense Dept. procedure policy (BW—Dec. 18 '54, p. 25). It was right in line with ODM's broad-base concept, and authorized payment of premium prices to keep certain producers going.

To Anderson, who thinks military expenditures will have to be maintained at a \$34-billion level for an indefinite



Fastenings

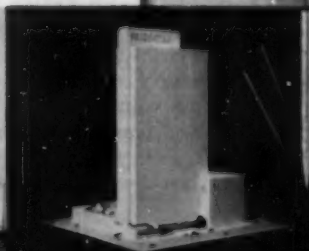
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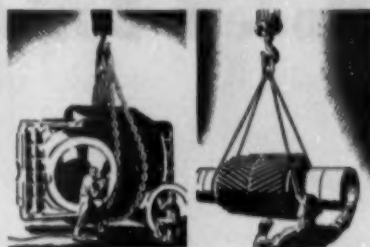
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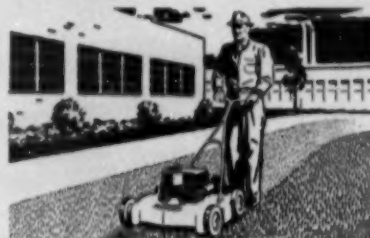
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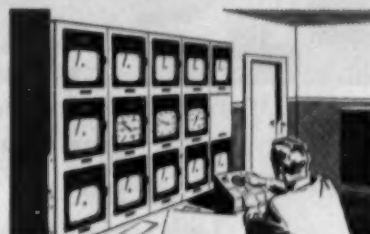
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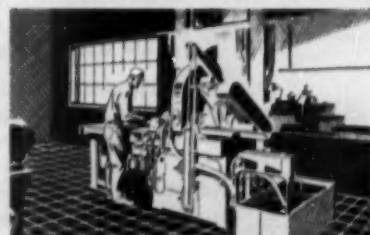
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As heir apparent to Defense Secy. Wilson, speculation on his political future grows.

ANDERSON starts on p. 106

period, the Pentagon's "new look" policy is important because it will help avoid the feast-and-famine aspects of military procurement.

IV. Top-Level Operations

Much of Anderson's time revolves around top-level conferences.

Every Monday morning, for example, he attends the Joint Secretaries meeting with Wilson and the three service Secretaries. On Tuesday morning, he goes to meetings of the Armed Forces Council, which includes the five members of the Joint Secretaries group plus members of the Joint Chiefs of Staff. On Wednesdays, he meets with the Operations Coordinating Board, which keeps track of how National Security Council decisions are being carried out. He frequently represents the Pentagon at meetings of the Interagency Defense Mobilization Board, an advisory body of Cabinet-level officials to ODM.

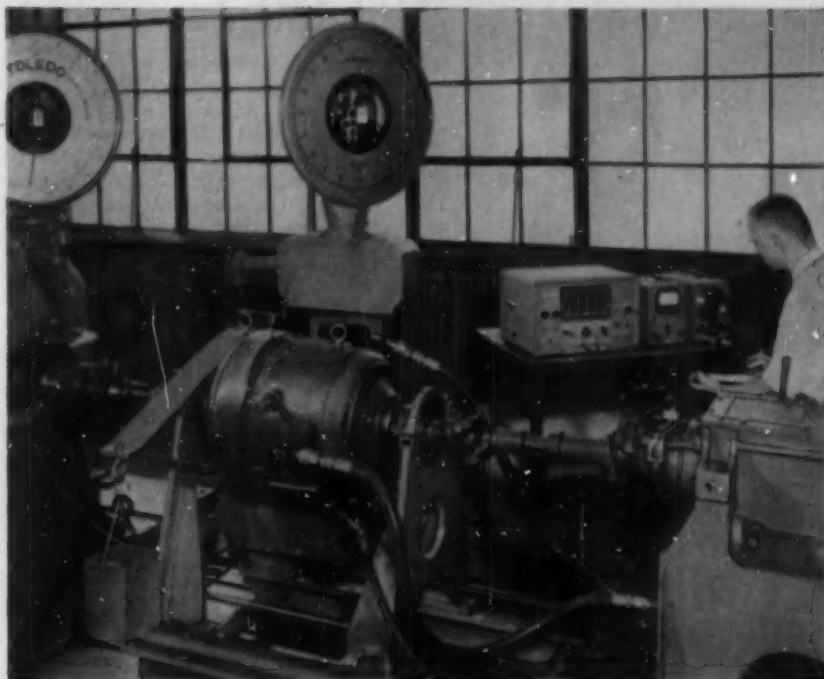
• **Obligation**—Anderson is often asked why he gave up the relative peace of the Texas oil and cattle business for the political hurly-burly of Washington. He says, "I felt it was an opportunity for me to discharge an obligation."

In his childhood, Anderson was stricken with polio, which left him with a slight limp. Because of the disability, he was exempted from military service during World War II.

He is distressed that government service isn't "clothed in greater dignity and esteem." He thinks that unless it is, government can become "a haven of mediocrity—a moribund establishment administering more money than the combined income of all the business corporations in the U.S."

• **Familiar Face**—Before his Navy ap-

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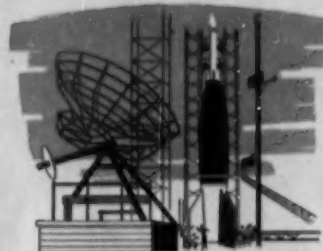
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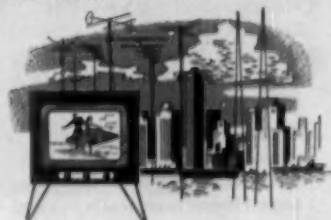
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"... a lot of people in Texas have political aspirations for him . . ."

ANDERSON starts on p. 106

pointment, Anderson was a frequent witness before Congressional committees on oil matters. For four years, he was president of the Texas Mid-Continent Oil & Gas Assn., an important trade group. As Deputy Defense Secretary, he now tries to keep his hands out of oil. But he isn't too successful. As the top government official with an oil background, the Administration turns to him often. He worked with Herbert Hoover, Jr., in the settlement of the Iranian oil crisis. He was active on the President's Cabinet Committee on Energy Supplies & Resources Policy, which recommended voluntary curbs on oil imports. Earlier this month, Anderson helped work up a compromise on the Neely oil-import restriction amendment to the Reciprocal Trade Bill.

Anderson got into the oil and cattle business at 27, when the Waggoner estate heirs lured him away from his position as chairman of the Texas Unemployment Commission. He is now on a leave of absence from the estate.

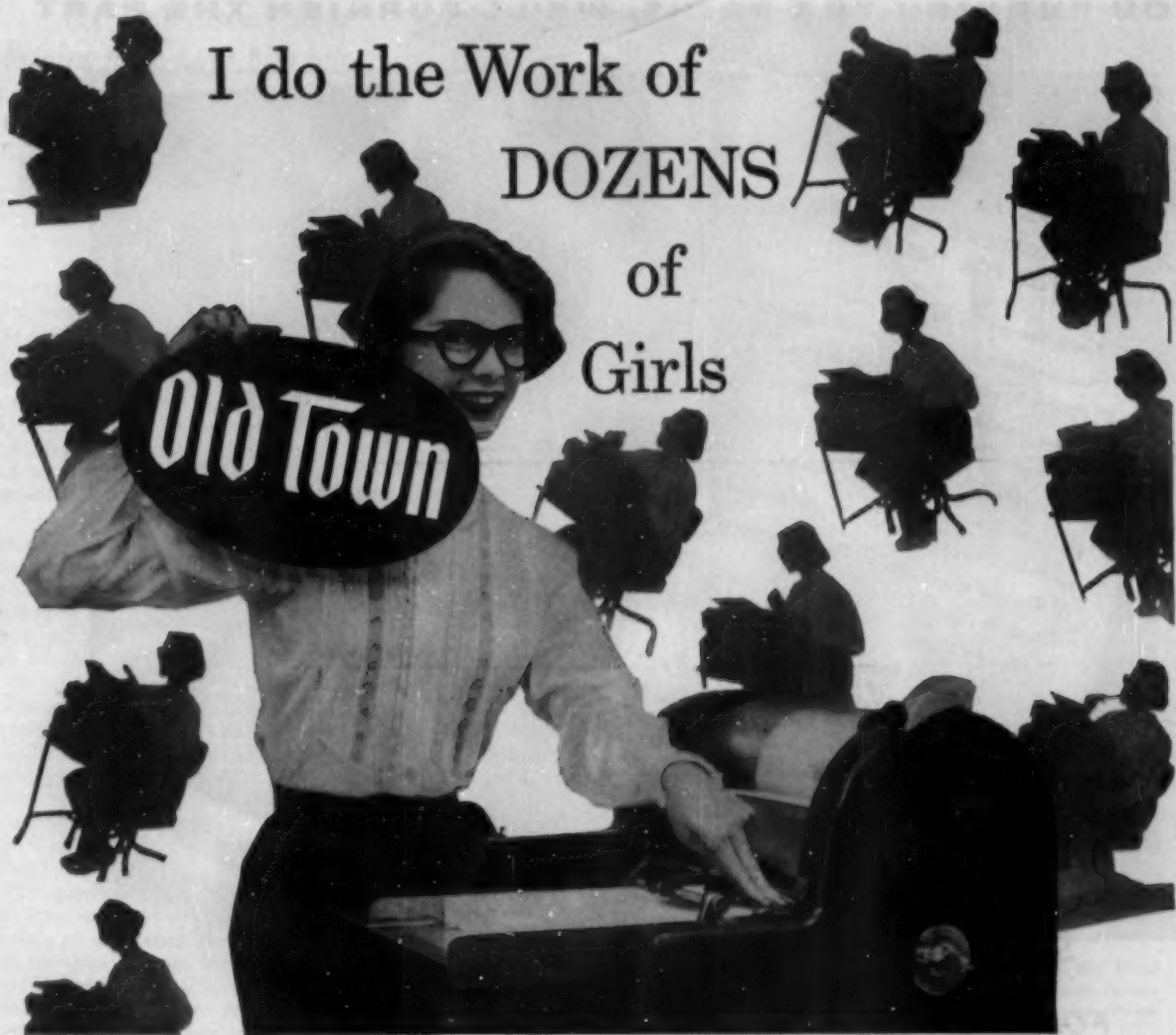
V. Heir Apparent

When he joined Waggoner, Anderson was about to start a shoestring campaign for state attorney general. He had aspirations to become governor. Since his Pentagon appointment, there has been a lot of new talk in Texas about Anderson's political future. Whether he still has political ambitions himself is unknown, but as one Texas politico says, "A lot of people here have political aspirations for him."

Presumably, Anderson is still a Democrat. Some people feel that his support of Eisenhower and his participation in a Republican Administration put the kibosh on any political future for him. Others disagree. They consider Anderson big enough to have escaped the bitterness in Texas between the Democrats who were loyal to the party in 1952 and those who bolted to Eisenhower.

There are several indications that Eisenhower has big things in mind for Anderson. The late Chief Justice Fred Vinson once quoted Eisenhower as saying, "I'd be for Anderson for President if he weren't a Democrat." Sen. Lyndon Johnson, a warm friend of Anderson's, says the President told him recently, "Bob is big enough to handle any job in this country."

At a White House dinner last year, the President said the GOP must build up some of its younger men as potential



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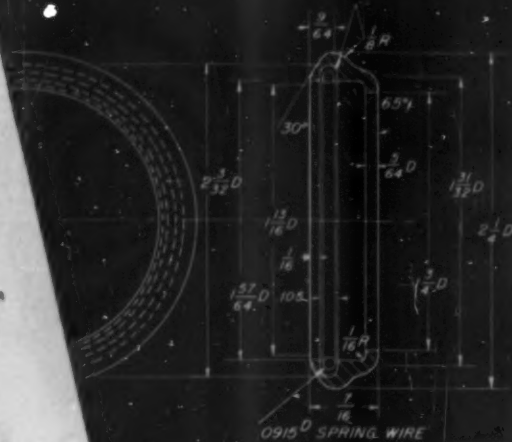
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"... his lack-luster press relations have kept him out of headlines ..."

ANDERSON starts on p. 106

Presidential or Vice-Presidential candidates. He reportedly named Anderson as one example of the men he had in mind.

• **School Days**—Anderson was born on a small cotton and dairy farm at Burleson, Tex., near Fort Worth. He graduated from Weatherford College in 1927, and for the next three years taught high school in Burleson (Spanish, history, and mathematics). His official Pentagon biography also notes that he coached the school's undefeated football team in 1929.

The following year, he turned to law, received his degree at the University of Texas in two years—with one of the highest records in the school's history. He stayed on as an instructor for two years, serving in the state legislature and conducting a private law practice at the same time.

• **Rumors**—In recent months, Washington has heard frequent rumors about Wilson's upcoming retirement from the Pentagon and Anderson's promotion to Defense Secretary. Anderson himself is embarrassed by all the talk. "It makes it look as if my friends are impatient," he says.

Pentagon insiders insist that Wilson will stay on until the end of Eisenhower's present term. But it's doubtful that he would remain for another four years—assuming the President's reelection. At that time, it is presumed, the Pentagon's top post would be Anderson's for the asking.

• **No Showman**—Despite his reputation in government, Anderson remains something of an enigma to the press. The Pentagon press corps looks at him as someone in an ivory tower—withdrawn and unapproachable. Aside from some select newspaper correspondents in Washington, he almost never sees reporters. As Secretary of the Navy, he held only one press conference. In his present job, he has appeared only once at one of Wilson's. He provided little news at either conference.

Soon after his appointment as Secretary of the Navy, the Pentagon's press regulars set up an off-the-record luncheon meeting to become acquainted with the new Navy boss. According to one reporter who attended, "It was extremely awkward. Anderson said almost nothing."

These lack-luster press relations, along with his unshowmanlike way of operating, have kept Anderson out of Washington headlines. Apparently, he likes it that way.



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COMMODITIES

Spud Dealers in Hot Water

Federal agency charges group attempted to manipulate futures market in potatoes. Head of accused firm says the dealings were personal.

Last week, it looked as though there might soon be a break in "the case of the vanishing potatoes."

The Commodity Exchange Authority (a branch of the Agriculture Dept.) charged Winn & Lovett Grocery Co. and six of that company's officials—along with five other closely associated companies—with attempting to manipulate the price of May, 1955, potato futures on the New York Mercantile Exchange.

The CEA complaint grew out of the default by short sellers on delivery of 627 contracts of May potatoes. Of this default, the Winn & Lovett group was responsible for 606 contracts—about 27-million lb. of spuds.

• **Delivery**—When a dealer sells a futures contract, he commits himself to deliver a certain quantity of the commodity by a certain date. If he doesn't actually have the commodity on hand at the time he sells the contract, he is "selling short." He can then do one of two things: He can wipe out his obligation by buying a futures contract for the same month, or he can buy the actual commodity on the open market and deliver.

If prices have fallen by delivery time, he makes a profit, since he has sold the futures contract at one price, bought it back or bought the actual commodity at a lower price. Conversely, if prices rise, he stands to lose.

Because of the necessity of making and taking delivery on contracts that aren't canceled out, futures prices are tied to the expected supply of the actual commodity—say, potatoes—at a given date. And this is where speculation comes in on a commodity exchange. If a dealer thinks that potatoes will be plentiful at a certain date he will sell a futures contract for that date—in the hope of buying it back later at a lower price. If another dealer disagrees, and thinks potatoes will be short, he will buy that contract. The futures price moves up or down depending on how most dealers feel about the situation: If most think potatoes will be plentiful, and sell futures, the price goes down; if most buy, the price goes up.

• **Manipulation Charge**—The essence of what CEA charges in the Winn & Lovett case is that the group tried to

manipulate the price of May, 1955 potato futures downward, both by selling substantial quantities on the exchange, beyond their ability to deliver, and, at the same time, by doing various things that made it seem as though there were plenty of potatoes available for delivery. If the alleged manipulation had been successful, that is, if prices had actually dropped, the group would have been able to buy its contracts back at a profit.

The complaint traces the potato dealings of Winn & Lovett and its associated companies from late March through May. It calls attention to the fact that, at one point—after having accumulated a substantial short position—the group satisfied some of its contracts by buying potatoes in Maine, repackaging and delivering them, even though it could have accomplished the same thing more cheaply by buying futures contracts on the New York exchange.

The implication is two-fold: (1) By delivering potatoes the group made it seem as though there were plenty of potatoes to deliver, and (2) if, instead, it had bought futures contracts on the exchange, it would have raised the futures price.

• **Heavy Selling**—The most serious charge concerns dealings just before the close of trading in the May, 1955, contract. Trading closed on May 20 (dealers then had until May 31 to deliver). In the closing minutes of the May 19 session, members of the group sold over 400 contracts, increasing their short position to more than 1,000 contracts, "with knowledge of the fact that they did not have and would be unable to obtain potatoes to deliver on the major portion of such position."

About this time, the complaint continues, the group also made "misleading and knowingly inaccurate" statements concerning its intention to deliver potatoes.

If, as the complaint alleges, the purpose of this last large sale of futures was to depress the price on the following day, it could only have been through stampeding the market. After all, for every futures contract sold, one would have to be bought back—under last-minute circumstances—the next day.

• **Family Affair**—Since the potato market is a relatively small one, where



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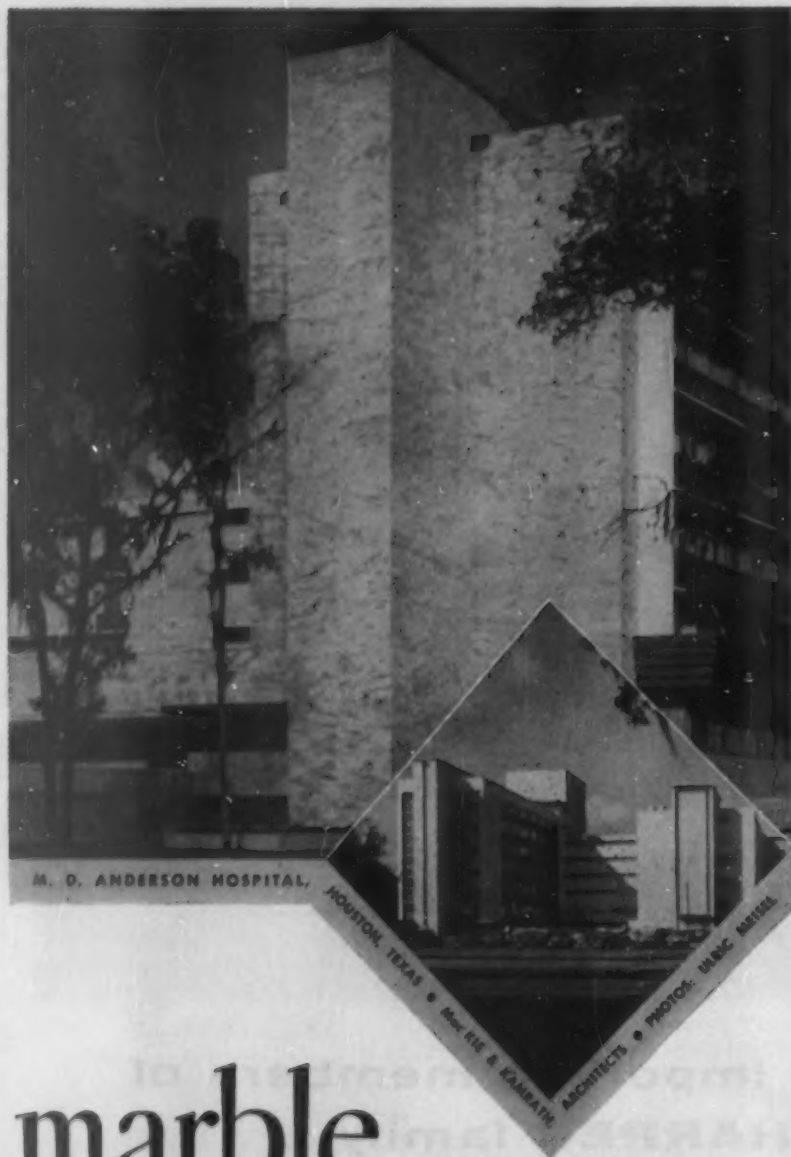
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everybody pretty much knows what everybody else is doing, most observers feel that the chance of stampeding the market was very small. Traders are privately wondering just what the Winn & Lovett group could have had in mind—if manipulation, indeed, was what it intended. As a matter of fact, instead of panicking, the market closed higher on May 20 than it did on May 19.

The Commodity Exchange Authority will hold public hearings on its complaint on July 20.

• **The Defense**—James E. Davis, chairman of Winn & Lovett and one of the individuals cited in the charges, says that the whole affair involved only his personal dealings and those of other individuals; that Winn & Lovett, as such, doesn't enter into the matter at all.

Davis claims that his purpose in all these transactions was actually to make delivery; that the potato market on the Mercantile Exchange is a "paper market" that doesn't reflect supply and demand and so works a hardship on men, like himself, who want to deal in actual potatoes; and that what he actually wanted to do was bring some real potatoes into the market.

• **Repacking Angle**—He explains his failure to make delivery by pointing to a situation that existed in the market at that time:

Exchange rules specify that potatoes must be delivered in 100-lb. bags. However, in an effort to raise prices, the Maine Committee of the Production & Marketing Administration put an order into effect in early March that prohibited the shipment of 2-in. potatoes—the basic grade on the exchange—in 100-lb. bags. This meant that anyone buying potatoes for delivery on a futures contract would have to repack them—an expensive business. As a result, the order sharply limited the number of such deliveries.

This order was suspended at a PMA meeting on May 17. According to Davis—and his defense of the defaults hinges on this point—the suspension of the order normally would have been published in the Federal Register on May 20; instead, it was not published until May 25.

Davis says that if that order had been published on time, he would have been able to bring enough potatoes down from Maine by May 31 to satisfy the contracts—and that the Maine price would have dropped enough to turn him a profit.

• **Doubters**—Traders here add a skeptical note. The Maine potato season was drawing to a close around the end of May, and most of the crop had already been sold. Even if the suspension had been published on the 20th, if Davis were going to fulfill all of

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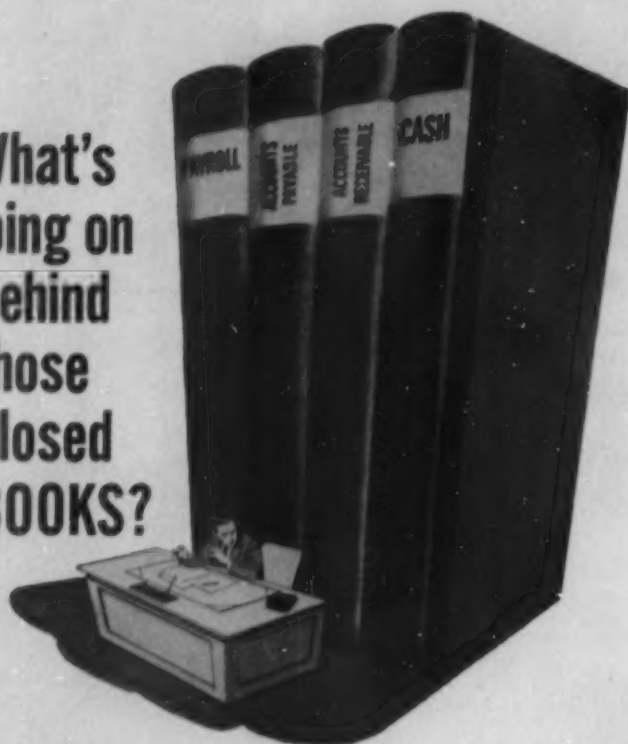
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his contracts, he would have had to buy half of all the potatoes left in Maine at that point—again, in a very short period of time. It's an open question what would have happened to prices in Maine under those circumstances, but traders surmise that even if he had been able to go through with his plan to deliver, he would have taken a bad beating doing it.

Natural Gas Scores Point in Congress

Natural gas producers won an interim victory last week in their fight to clear themselves of direct federal controls (BW-May 21 '55, p129). But the margin of victory was so narrow that nobody was doing much cheering.

After several months of debate, the the Harris bill squeaked through the House Commerce Committee by a 16 to 15 vote. Under the bill, producers are exempt from Federal Power Commission control, but FPC still keeps indirect control over natural gas prices. The bill provides that FPC, instead of setting the price the producer may charge, would apply a "reasonable market price" test to decide how much the pipeline may pay.

The close vote in committee is a sure sign of a rough battle on the House floor.

Silver Perks Up

After slumbering at the same level for more than two years, the price of commercial silver suddenly came to life last March, and has been frisking around ever since.

The price awakening came when a high demand, both in this country and abroad, bumped into a sudden reduction in supply. Offerings from Mexico, the main source of commercial silver in the U.S., have dropped off since that country sold a large part of its current and future production abroad for coinage. At the same time, offerings from Russia and Japan on the London market are down, and world supplies are tight.

The U.S. Treasury buys U.S.-mined silver at an effective price of 90.41¢ per oz. for the commercial grade of the metal. So long as the commercial price is under the Treasury buying price, the effect is to keep domestic silver off the market. About a month ago, however, the commercial price moved up to and crossed the Treasury price line. This brought domestic silver into the open market, and the supply situation eased. Last week, as a result, the open-market price once again dropped below the Treasury price.



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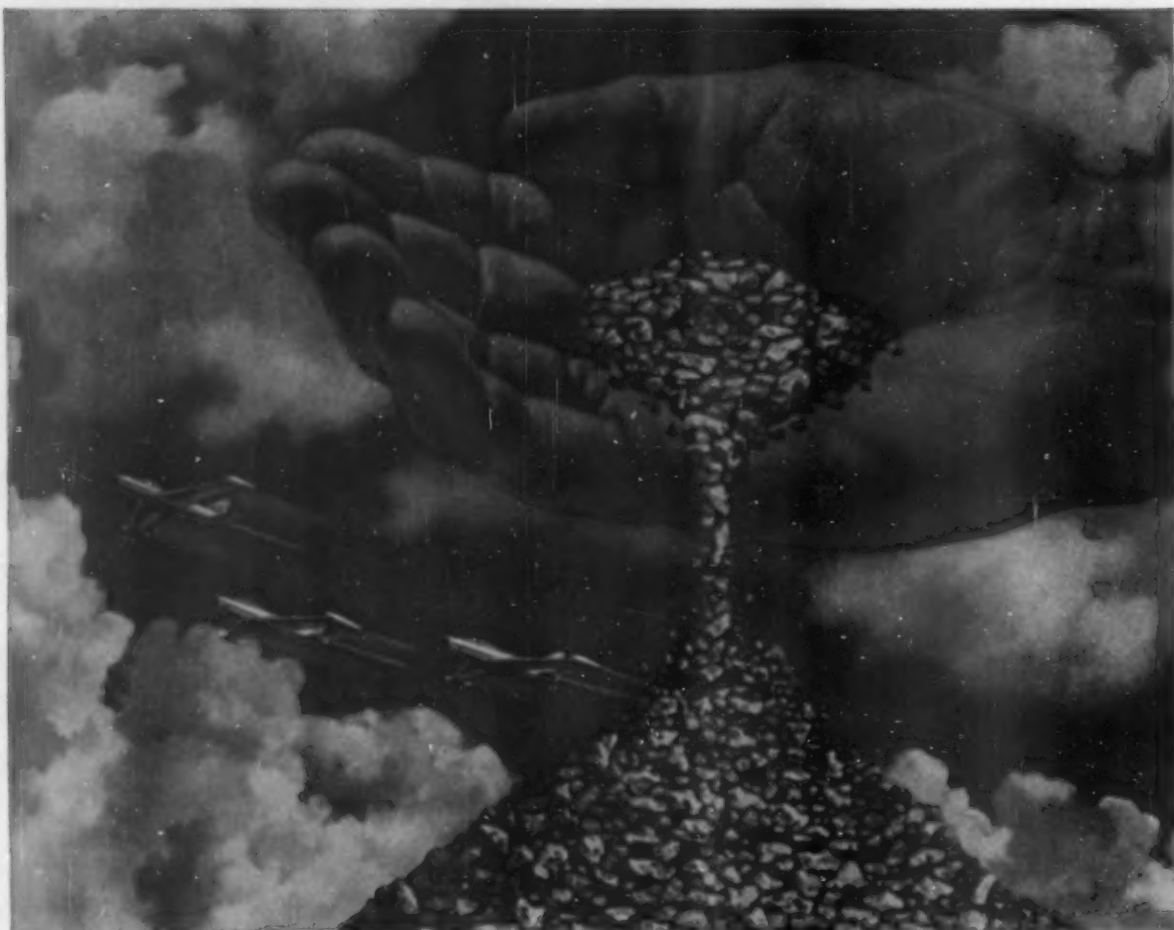
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MARKETING

Splitting Country Gentleman

Farm Journal hopes to build up both Town Journal and its farm paper with Country Gentleman subscribers . . . Super King Cole super on way . . . Toledo's downtown merchants take to warpath . . . FTC eyes antibiotics . . . All-black cars are out, says Chevy.

The news that Curtis Publishing Co. had sold its century-old Country Gentleman to its competitor, Farm Journal, hit publishing row with a boom last week (BW-Jun.11'55,p34).

It was one of the biggest recent deals in magazine publishing. Basically, the switch of ownership appears to be an effort to shake out a tangled magazine market.

Neither Curtis nor Farm Journal, Inc., is saying just what the deal was. Best guess puts the price Farm Journal paid at around \$4-million. There will be two more issues of the old Country Gentleman (renamed Better Farming as of last January); by September it will merge with Farm Journal.

The trade's tongue had been wagging with rumors of some kind of deal for weeks. But everyone—apparently even the editorial staff of Country Gentleman—was surprised when the sale was announced. A responsible source says that the magazine's editors first got the word at a conference originally set up to talk over the purchase of another farm magazine.

It isn't any secret that Country Gentleman has been in financial hot water for several years. Curtis isn't saying so, but the trade has it that the book lost \$1-million in 1953, more than that in 1954.

One problem has been that the number of farm families has been steadily dwindling. The last government count put it at 5.5-million families in 1953. That makes a limited circulation, to start with.

To offset the shrinking farm population, Curtis started back in the 1930s to sell Country Gentleman to rural, but not strictly farm, readers—to butchers, jewelers, others whose principal customers were farmers. It hit the small towns, those with a population up to 10,000. But as "farm" circulation, these were suspect—and farm advertisers knew this.

The trade says that Curtis came close to folding Country Gentleman in the 1930s. For, in addition to a dwindling farm readership, the race for advertisers was on. At that time, farm suppliers were the chief source of ad revenues.

Then, consumer goods manufacturers started to buy advertising. At that time, Saturday Evening Post, big Curtis weekly, was weak in rural areas. By combining with Country Gentleman, though, Curtis could show the auto makers a total circulation that about duplicated auto registrations nationally. So Curtis hung on.

Now, there are no big new blocks of advertisers to lure to the farm papers. That, plus shrinking farm population, spelled trouble.

Last January, Country Gentleman made one more try. It added the tag Better Farming to its name, made some drastic mechanical changes—a smaller page, new type face. But editorially, it was pretty much as before.

• **The Buyer's View**—Purchasing the ailing Country Gentleman offers some promise for Farm Journal.

First, it knocks off the magazine's No. 1 competitor. Second—and maybe the key to the purchase—that farm circulation that isn't really farm circulation can fit nicely into another pocket of Farm Journal, Inc. This is the company's Town Journal (formerly Pathfinder).

Richard J. Babcock, president of Farm Journal, Inc., figures that Country Gentleman's subscription circulation will split up this way: Some 700,000 of the 2.4-million subscribers are also on Farm Journal's list. Of the rest, Farm Journal expects to get about 100,000 for itself; Town Journal counts on taking over between 500,000 to 600,000. "We want to shake out the nonfarm readers of Farm Journal and get them reading Town Journal," says Babcock. "This makes a lot of sense to both the readers and the advertisers of the two magazines." As an indication of what the addition of Country Gentleman will mean, ad rates for both Farm Journal magazines will go up next February.

The question arises: What next for Curtis? Old-timers on its list are Saturday Evening Post—with average net paid circulation of close to 4.6-million in 1954, gross ad revenues of \$78-million; Ladies' Home Journal, with circulation of 4.9-million, gross ad sales of \$20.6-million; Holiday, with net circulation of

846,000 and revenues of \$5.3-million, and Jack & Jill, with a circulation of 713,208.

In addition, Curtis bought a controlling interest in Science & Mechanics Publishing Co. last September. Science & Mechanics is a bimonthly. The first of this year, it tried a new magazine, TV Program Week—and suspended it after eight issues. Now, the company is about to bring out a new quarterly publication, Bride-to-Be. It will sell—at newsstands only—for \$1 a copy.

• **Plans for a new King Cole supermarket in Bridgeport, Conn., promise to make this the biggest supermarket in the East (about 50,000 sq. ft.).**

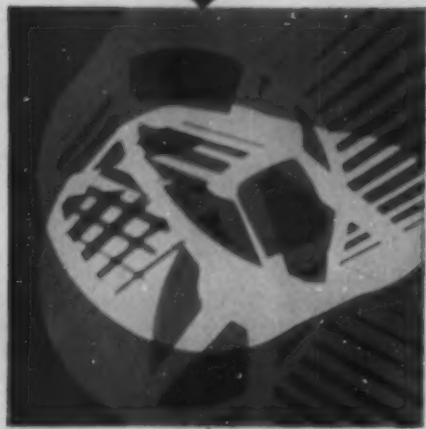
Among the innovations called for by Fletcher-Thompson, Inc., architect for the \$1-million project, is a building for case lots, separated from the rest of the store. This is for customers who want to buy in semi-wholesale amounts—a case of soup, for example. Another frill is a 600-ft. underground conveyor that will carry packages from the check-out counter to a pickup point. The customer gets a plastic ticket at the counter when he pays; when he gets to the pickup station he turns in his ticket, and an attendant loads his packages into his car.

• **Toledo's downtown merchants have chosen Michael V. DiSalle—stompy petrel of the Truman Administration when he headed the Office of Price Stabilization—to quarterback their fight against the suburban shops.**

Businessmen are joining hands—and pocketbooks—in a drive to revitalize downtown Toledo. They have just formed the nonprofit Downtown Toledo Associates to do the job. At the kickoff meeting, the group rolled up pledges of more than \$130,000 out of a first-year goal of \$147,400.

Michael Yamin, president of LaSalle & Kock, the Macy-owned department store in Toledo, said the new organization will work on projects like these:

- Providing more low-rate, short-term parking downtown;
- Improving the face of the downtown area by eliminating "commercial slums," modernizing older buildings, and the like;
- Speeding up traffic through the business district, with a ban on all on-street parking as the first step;



The older and more experienced a manufacturer becomes, the more he appreciates that success is not solely a matter of producing a fine product at a fair price. Rather it is the sum total of all the services, great and small, which he renders to his customers day by day and throughout the years.



THE
TORRINGTON
MANUFACTURING COMPANY
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• Improving public transportation for shoppers;

• About mid-August, launching a huge promotion campaign aimed at luring more shoppers.

Toledo downtown stores are only beginning to feel the effect of suburban shopping centers, with only a few small ones now operating. The big \$10-million Miracle Mile center, being constructed by the Don Caso organization of Columbus, will open this summer, however. Then the downtowners expect to feel a pinch.

•
Pricing of antibiotics will be investigated by Federal Trade Commission.

Once FTC gets its merger study "and a couple of other" reports out of the way, commission staffers will begin a broad economic survey of the antibiotic field, checking into such matters as cost of research and of production. The point that has piqued FTC's curiosity: Why are the prices of such antibiotics as Aureomycin, Terramycin, and Chloromycetin so much higher than penicillin and Streptomycin?

FTC took a look at pricing of antibiotics made by single producers several years ago. At that time, it found no illegal horizontal price fixing. In fact, it found that once the original experimental costs had been taken care of, prices dropped rapidly.

•
The all-black car is a dying breed. So says T. H. Keating, general manager of the Chevrolet Div. of General Motors. According to him, the consumer's preference for two tones and brighter hues is more than a trend; it's a revolution in buying habits.

A recent survey by Chevrolet showed that more than half of the division's current production is in cars painted in sharply contrasting colors. To the surprise of auto manufacturers, white is one of the most popular new colors. Some 40% of recent Chevy shipments carried white; 19% of the paint used by Oldsmobile is white.

Top favorites, though, are green and blue. Oldsmobile puts 21% of its paint in green, and 20% in some shade of blue. Chevy reports that greens are favored in the Far West, South, Southwest, and Middle West. Eastern buyers seem to go for blues.

But the two-tone has taken over. In April, only 13% of Chevrolet sedans shipped to dealers were all green; in 1950, 31% were. Five years ago, 25% of Chevy sedans were solid black; this year, only 5%.

A final indication that all-black is on the way out: New police cars in Dearborn, Mich., are bright yellow. A plain black car stands out as a "cop car," the mayor says.

(Advertisement)

OFFICE FLOORING



Carpeting: Paying off in employee work areas

As more and more new buildings go up and more firms move into new quarters, businessmen are faced with the problem: Which type of floor will perform best?

A strong trend toward carpet is evident not only in executive offices but in employee work areas as well. In billing departments, stenographic pools and other open work areas, carpet creates a restful, calm atmosphere that boosts employee morale and increases efficiency.

Sound Control — Because of its superiority in sound control, (it eliminates virtually all floor noise and a

substantial percentage of air-borne noises) carpet takes the lead in reducing costly office errors due to noise. It also cuts down on the "breaks" caused by drifting conversations and laughter.

Safety — As a safety element, carpet has a clear margin of superiority. It prevents slips and skids in what might otherwise be "accident areas".

In addition, carpet is extremely inexpensive to maintain. The combination of all these economy features and the prestige carpet brings to an office, are influencing more firms toward carpet throughout their offices.

Buy carpets designed and made for the American way of life by these American manufacturers

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Leedom • Lees • Magee • Masland • Mohawk • Nye-Wait • Philadelphia Carpet • Roxbury • Sanford • Alexander Smith

CARPET INSTITUTE, INC., 350 Fifth Avenue, New York 1, N. Y.

Keeping Tabs on Sales and Inventories

Here Are Some of the Ways to Do It:

| You Can . . . | Who Does It | Goods Covered | Frequency |
|--|--|---|------------------------|
| Survey a large number of stores of a particular type that you want | "Nielsen Food & Drug Index" A. C. Nielsen Co. | Food Toiletries Cosmetics Drugs | Bi-monthly |
| Get people to keep "diaries" of the things their families buy | "National Consumer Panel" Market Research Corp. of Amer. Ica | Foods Drugs Toiletries Cosmetics Phonograph records, etc. | Weekly |
| Make intensive surveys of almost all dealers in laboratory markets | "Camm Plan" Collegiate Associates for Market Measurement | Appliances Other durables | (Not yet in operation) |
| Survey a representative sample of all types of stores nationally | "National Total-Market Audit" Audits & Surveys Co. | Foods Toiletries (Eventually durables) | Monthly |

New Sales Survey Aims to Catch

If money were no object, a lot of marketing research would be no problem. Given millions of dollars a year and a thousand or so people to do the field work, you could keep pretty accurate check on the sales of your products and those of your competitors.

However, since things aren't like this in the world of business, commercial research has to come to terms with reality. And on those terms, no one so far has come up with a perfect way—one that's both fast and thoroughly satisfactory—of reporting those elusive sales and inventory figures.

This explains why, despite all the regularly scheduled surveys now in existence, still another competitor, Audits & Surveys Co., has come up with an offering it calls the "National Total-Market Audit." Using a method different from those of its chief competitors (table, above), the company this week completed its first total-market survey of sales and inventories, for six toiletries and household products.

• "Sample Universe"—In brief, what the company has done is to construct a national sample of stores, not limited to any particular kind of outlet, but including all types. From this, theoretically, you can derive sales and inventory data for almost any goods sold through retail channels. This so-called

"sample universe" comprises in all some 20,000 retail and service outlets of all kinds in 1,200 areas in the U.S.

Projected on a national scale, says the company, the sample will give figures that jibe with those given by the Census of Business for the country as a whole.

Thus, Audits & Surveys tries to get at the "total market" for a product in all parts of the U.S., no matter in what kind of outlet it is sold—in contrast to other store surveys that are more limited either in the type of outlets or the areas covered. Its method of surveying stores also contrasts with another method used to study the "total market"—a survey of consumers to find out what they buy.

• Cost—On the present basis Audits & Surveys' setup, with its 150 field people, costs the company more than \$1-million a year to run. As more products are added, costs will rise. By the end of this year, for example, Audits & Surveys hopes to have at least one client for appliances.

I. Why a New Survey?

There are already a number of continuing audits besides those listed above. As one example, J. Walter Thompson Co., the country's No. 1 advertising

agency, maintains a regular audit of sales for clients. The Chicago Tribune runs another one. Besides this there are various other national and regional audits, some run privately, some aimed at specialized markets such as the hospital supply market.

• Pioneer—The classic survey, of course, is the famous Nielsen Food & Drug Index prepared by A. C. Nielsen Co. in Chicago, which has been awarded numerous honors for its pioneering work in the field. Nielsen has various strings to its bow—for one thing, it also runs the Nielsen rating service on television shows—but it is chiefly renowned for its index, which has more than 200 subscribers. The basis of the index is a carefully constructed sample of food, variety, and drug stores, from which Nielsen researchers cull bi-monthly enormous amounts of data on sales, purchases, inventories, brand competition, prices, displays, and so forth.

But even Nielsen, long regarded as the bible of the food and drug industries, has its weak spots. For one thing, it does not cover A&P, Safeway, and other chains that won't cooperate. Another major weakness is the fact that a lot of products, particularly in the toiletries and cosmetics field, are widely distributed today by other outlets than those covered by Nielsen.

of Consumer Goods

| Size of Sample | How Data Is Collected | Remarks |
|---|--|---|
| 1,600 food stores 750 drugstores | 175 field men check store invoice, sales, stock on hand | Classic in field. Over 200 subscribers |
| 6,000 families | Families record purchases, mail in details such as price, where purchased, etc. | Now studying use of even larger sample |
| 80 metropolitan areas. More later | University faculty members look over books, check inventories, interview dealers | Test studies made in Lansing, Mich., and Syracuse, N.Y. |
| In all 20,000 retail outlets in 1,200 areas | 150 field people check invoices and stock of 400 stores each month | Already doing national RETMA survey of TV set sales. First nondurable goods audit out this week |

©BUSINESS WEEK

All the Outlets

• **Consumer Approach**—As a result, many manufacturers supplement their Nielsen surveys with another type of service using a different approach—the consumer panel method. This uses for its measuring rod the records kept by a representative cross-section of U.S. families on their purchases of specific products. The champion of this method is Market Research Corp. of America, which has garnered more than 60 new subscribers for its service since the war.

The strength of the method is that it offers a way to measure the total market—in other words to pick up, theoretically, all purchases of a given product by consumers no matter in what outlet they buy. One major weakness, according to some marketing people, is that constant use of the same group of consumers creates a distortion, because of the tendency of the people involved to become “experts.” They therefore—so the argument goes—cease to be typical consumers.

• **Market to Market**—A third approach is that of John E. Wiley, organizer of the Collegiate Associates for Market Measurement (BW—Oct. 2 '54, p. 44). His plan is intensive rather than extensive. It aims to get marketing data by brands by digging deeper into particular markets that are used as “laboratory” or test areas.

The basis for his plan is the fact that with major appliances you have very skimpy distribution; in other words, only a few stores in any given area carry a given brand. Furthermore, purchases of big-ticket appliances are relatively infrequent as compared with the turnover in consumable items, where people come back to buy several times a month or more. Only by covering a market completely and not just by sample, Wiley thinks, can you get full data on what is happening, brand by brand.

Whether Wiley's plan is too cumbersome to get going on a national scale remains to be seen.

II. Audits & Surveys

Audits & Surveys is an offshoot of Elmo Roper & Associates, which has been for some years one of the best-known names in the field of opinion research. Roper himself owns the controlling interest in the new company, which was set up in business several years ago.

Its initial success has been with the regular surveys of TV set sales in a representative sample of stores in 450 areas nationally. These figures on retail sales and inventories are supplied to the Radio-Electronics-Television

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Manufacturers Assn. (RETMA). According to industry experts, these surveys have been responsible for preventing a volatile industry from repeating the mistake of a few years ago, when it very nearly foundered under a staggering inventory that was collecting in the distribution pipeline without the knowledge of the manufacturers (BW—Oct. 30 '54, p56).

• **Candy Bars and Samples**—The company's new survey setup first suggested itself several years ago when the problem of how to check retail sales of candy bars came up. Since candy bars are sold through almost every conceivable outlet, the question of how to set up a survey of sales was a very real problem indeed.

In constructing its so-called sample universe, the group started by taking the nation's entire 3,136 counties and recombining these into 1,893 trading areas.

It then regrouped these into 71 classifications (or "strata")—first sorting them out according to region, then by size of city, next by the degree of urbanization, finally according to retail growth. The 12 major metropolitan areas of the country were automatically included.

• **Maps**—Next Audits & Surveys got out the maps. For downtown areas it used the building-by-building maps developed by the Sanborn Map Co. for fire insurance use. For outlying areas, it relied on maps of the enumeration districts set up for the Census of Business. All told, these maps gave the company 600,000 districts to pick from. It decided that it could handle a sample of 1,200 districts on a monthly survey basis—arriving at that figure by calculating the cost of surveying on one hand, and the minimum number of districts needed for a representative sample of retail stores on the other.

Next step was to pick the actual 1,200 districts to make up the sample. This was done by random choice, but with the selection weighted so that the districts with a heavier concentration of stores would have a greater chance of being picked.

Finally, the researchers picked the precise section in each district—say, every 20th block—in which field interviewers would work, store by store, to get their data.

• **Representative**—Altogether, these 1,200 districts, or "clusters," contain some 20,000 retail and service establishments of all kinds—everything from newsstands and grocery stores to real estate offices and department stores. Some of the districts are "zero" areas—that is they are purely residential zones.

This sample, says Audits & Surveys, is representative of the total U.S. retailing picture. Projected on a national scale, the sample puts total retail and

service establishments at 1,733,342—slightly under the 1953 projection of the Census of Business, which put the number at 1,747,850. The company thinks the difference is accounted for by a slight shrinkage in retail population in the past few years.

Before it took any surveys of sales and inventories, the group first made a distribution study covering every establishment in its entire sample universe to see exactly what it had. (Audits & Surveys will continue to make such studies every half year to keep the sample up to date and to catch any shifts in retailing.) The field people took down all kinds of data, from the size of the store to just what products and brands it carries. From this basic listing, the field people know what stores to visit when they make the monthly surveys.

• **Down to Size**—But even if you whittle down this 20,000-store sample to the ones that carry the products concerned in a particular survey, it's still big—too big, the company feels, to handle on a regular monthly basis. So it has gone two steps further in getting the sample down to manageable size for its 150 field people. First, it decided that for each product it would establish a sample of 800 stores that carry that product; next it decided to survey half of these one month, the other half the next month.

• **Problems**—It is difficult this early in the game to assess the company's possibilities of success with its new service.

In several instances, it is open to the same criticism that applies to some of the other services now existing. For example, how will it check the sales of those chains that refuse to cooperate with Nielsen and other surveys? Audits & Surveys' Solomon Dutka, formerly chief statistician for Dun & Bradstreet, says, "I think we have that one licked." But when pressed for details, he shrugs questions off with a smile.

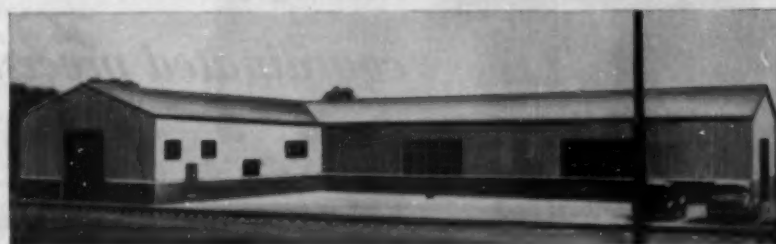
Another potential problem is how the Audits & Surveys sample, as now constructed, can catch the sales of appliances that don't go through regular over-the-counter retail channels—the ones that are sold mail-order or that bypass the dealer and are sold direct to builders and contractors. On this score, the company stresses that the service is a retail survey, strictly.

• **Branching Out**—So far there are three subscribers to the service; they manufacture face cream, lipsticks, hair tonic, home permanents, shampoo, insecticides. The company is prepared to take on in this survey 29 different products in all—but in the field of toiletries, beauty items, and the like. It also intends to broaden out beyond this field, and is now soliciting appliance manufacturers and others for a durable-goods survey.

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|---|-----------------|--|---|--|
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| ELECTRONICS | ●●●● | ●● | ●●●● | ●●●● |
| HYDRAULICS, LIQUIDS PROCESSING, HEAT EXCHANGE | | ●● | ●●●● | ●●●● |
| TELEVISION Studio, Theatre, Educational, Business, Industrial | ● | ● | ●●●● | ● |
| INSTRUMENTS, SERVOS, CONTROLS Hydraulic, Pneumatic, Magnetic, Electronic | ●●●● | ● | ●●●● | ●●●● |
| AIRCRAFT and MISSILE GUIDANCE, CONTROL, SIMULATION | ●●●● | ● | ●●●● | ●●●● |
| AUTOMATIC COMPUTERS and COMPONENTS | ●●●● | ● | ●●●● | ●●●● |
| RADAR, MICROWAVE, ULTRASONICS | ●●●● | ● | ●●●● | ●●●● |
| MOTION PICTURE and AUDIO EQUIPMENT | | ●●●● | ●●●● | ●●●● |
| NUCLEAR POWER COMPONENTS and CONTROLS | ●●●● | | ●● | ●●●● |
| SYSTEMS ENGINEERING Aeronautical, Naval, Industrial | ●●●● | | ●●●● | ●●●● |
| KEARFOOT COMPANY, INC. | | | | |
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| LIMASCOPE, INCORPORATED | | | | |

The specialized capacities of the producing companies of General Precision Equipment Corporation are indicated on the chart above.

The selective interaction of these capacities, and the pooled resources of all the GPE Companies through GPE Coordinated Precision Technology, have been responsible for highly advanced precision equipment and systems which importantly serve more than a dozen major industries.

In the **Marine** industry, for example:

¶ Griscom-Russell supplies distilling plants, evaporators, heaters and coolers for almost every type of ship afloat. The Navy's new super aircraft carriers, the FORRESTAL and the SARATOGA, will sail with Griscom-Russell equipment; it is also aboard the first nuclear powered submarine, the NAUTILUS. One of the largest manufacturers of heat transfer equipment in the country today, Griscom-Russell seventy years ago pioneered in the development of equipment which has resulted in eliminating the need for loading fresh water on ocean-going vessels.

¶ Bludworth Marine designs and manufactures electro-acoustical equipment and electronic navigation aids for marine use. Bludworth supersonic survey echo depth sounding equipment, originally developed by International Projector and further developed by Bludworth, played important roles during the war. Redesigned, it is now used for industrial and commercial purposes.

¶ Through the sensitive dials of an instrument developed by Link Aviation and further evolved by Bludworth, Columbus' flagship, the SANTA MARIA, lost one stormy night over 400 years ago off Hispaniola, may soon come to light. The instrument, Bludworth Marine's Metal Locator, is used in salvage operations and to locate cables, pipe lines and other submerged objects.

¶ Kearfoot produces ninety percent of all manufactured ships' windows on American vessels; also a variety of associated equipment such as wipers, thermostatically controlled de-icing glass, etc. The most modern vessels—including the liner AMERICA and the Navy's FORRESTAL—are Kearfoot equipped.

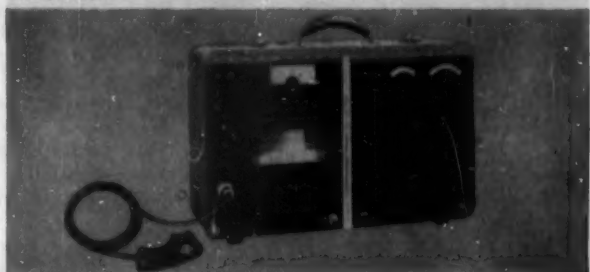
¶ Askania Regulator designs and builds a multitude of precision instruments and controls used in the most advanced vessels of the U. S. Navy. Most submarine trainers are also Askania-developed and produced. Askania automatic dive gear has established new standards for submarine performance and greatly extended submarine manoeuvrability.

Only a part of the work of the GPE Companies in the marine field has been presented here. Some of the most advanced examples—such as certain highly specialized equipment of Librascope and General Precision Laboratory—are classified and may not be discussed.

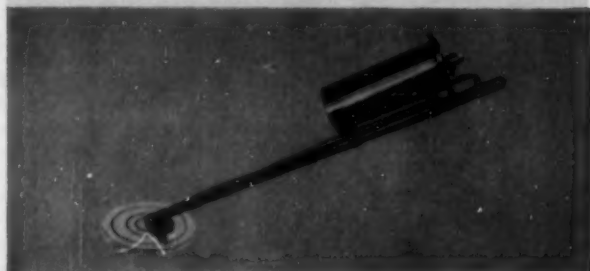
A brochure more fully descriptive of the work of all the GPE Companies is available. Address your request, or inquiries on specific products, to: GENERAL PRECISION EQUIPMENT CORPORATION, 92 Gold Street, New York 38, N. Y.



Griscom-Russell Flash Type Distilling Plant; light, compact, easily serviced; transforms sea water into distilled water in five progressive stages; yields 50,000 gallons of pure water per day.



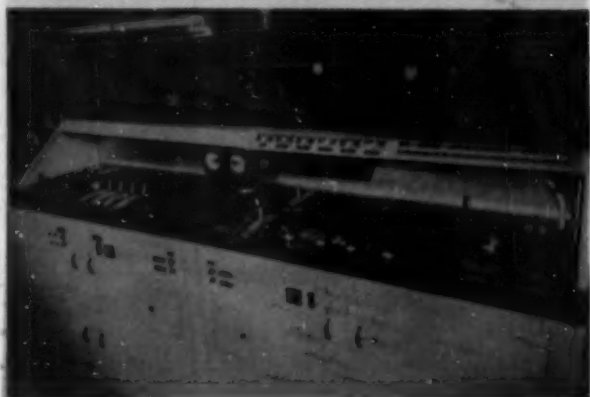
Bludworth Marine Recording Depth-O-Meter; survey type; used in harbor and general underwater surveys, commercial fishing, dredging operations, oil exploration, etc.; accuracy ± 3 inches at 100 ft. depth.

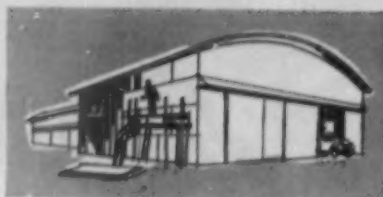


Bludworth Marine Underwater Metal Locator; pressurized to 20 lbs. per sq. inch; uses super-sensitive amplifier, with batteries, in a single, watertight, non-corrosive housing secured to detector unit.



Kearfoot Marine Windows on flying bridge of super-liner; standard equipment—from launches to largest vessels. Below: Askania Submarine Trainer; combines electro-mechanical, hydraulic and electronic sub-assemblies. One of Askania's many training devices.





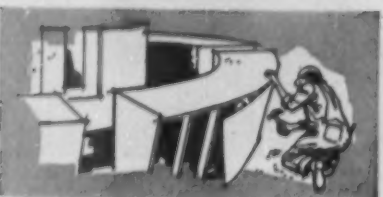
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How to Keep Stock Moving

Sportempos' system of on-the-spot retailer inventory and reordering is giving the skirt manufacturer's merchandise an all-season sales whirl.

Surveys to find out the size of your inventories are all very well (page 132). But if you are willing to spend the money, there's another way to do it: Go out and count them.

That is what Sportempos, New York City, skirt manufacturer does. In the less than two years that the company has been alive, brothers Jack Baker, president, and Matt, national sales director, have built up a business that will bring them \$3.5-million sales this year.

Like every other inventory count, Sportempos' system aims at easing the peaks and troughs that every manufacturer—from appliance to brassiere maker—dreads. Here's how the Bakers do it.

The plan—now in use by nearly 60 of its big retailer customers—requires an O.K. from the store's top management. It also requires, at the start, an analysis by the store of its own skirt sales in a given period, say the preceding six months.

With the store's analysis as a base, Sportempos figures out how many skirts the store will need, how much money it will take to keep the store in those skirts over a three months' period.

• **Weekly Count**—Once the store has its initial stock, the second phase of the program begins. This is a week-by-week reevaluation of the stock the store has on hand, based on a weekly nose count of all the Sportempos skirts. Sometimes the store's own clerks take this count. But it is part of Sportempos' service that its own specially trained salesmen—the company calls them merchandising consultants—go into the store and do the counting.

These consultants fill out a form for the store, prepared by Sportempos, showing precisely how many skirts, in what sizes, colors, price, fabric, the retailer has. Since Sportempos dates its stock when it ships it out, the store also can tell how long each skirt has been in stock.

These reports go to Sportempos headquarters in New York City. From them, the manufacturer can spot just what items are short, where the store needs replenishing. It calls up the store, tells the buyer what he needs, and ships it out.

• **What's Moving**—Sportempos can also tell at a glance what is selling, what isn't, in a given store. And it can alter the future orders accordingly. Say yellow is doing especially well

whereas lilac is a flop. Since Sportempos buys its fabrics in the grey, it can change its dyeing schedule to fit the demand. Furthermore, it will take out of a store those styles that aren't selling there, ship them to a store where they are moving.

Meanwhile, Sportempos' own clerks transfer the individual store reports to larger control sheets that amalgamate the information from all participating stores. So Sportempos knows exactly where it stands in inventories on its biggest accounts.

A last step in the process is to feed all the reorders into International Business Machines equipment. These machines then come up with a form that recaps for Sportempos everything it has on order, broken down by states, cities, and skirt style (including price, fabric, size, and color).

• **Volume**—The payoff for the store—and for Sportempos—is bigger volume. Since the store has only those skirts it can sell readily, its sales rise. Jack Baker reports that retailers have trebled and even quadrupled their skirt sales through this service. That also means fewer markdowns—Sportempos avoids these like the plague—to get rid of slow items.

What's more, the entire business of inventory taking and reordering is taken off the hands of the overworked store personnel. In a sense, Sportempos itself performs the buying function, leaving to the store the job of selling the goods.

This system is basically simple, though carrying it out is a complex process. At the merchandising end, it recalls various other devices whereby retailers have tried to unload some of their headaches to insure a steady flow of merchandise. Jack Baker himself says their operation is very like a leased department—except that in a leased department the department operator owns the merchandise, pays the store a commission to take care of the rent and other services the store supplies.

To the extent that the manufacturer keeps a check on the stocks, sees that the store has the merchandise it needs, and switches slow items to other outlets, the Sportempos plan smacks of a rack jobbing operation, or a chain store setup. It is like chain store, too, in this: By taking over much of the retailer's reordering work, Sportempos acts almost like a chain store's central buyer. In laying out the store's quota for a three-month period, the plan re-

sembles specialized merchandising systems such as Handmacher-Vogel, Inc., suit manufacturer that requires buyers to do all their buying at the start of a season (BW—Oct. 20 '51, p132).

• **Dodging Pitfalls**—The system avoids one of the hazards of other variants of automatic reordering. Generally, automatic reordering depends heavily on the retail sales girl. Her job usually is to send in the IBM ticket that calls for a new order.

Unfortunately, to many a sales girl this small extra task seems like one too many. In fact, one of the most ambitious plans of inventory regulation yet to have been tried founiered on just this point. Back in 1950 (BW—Jul. 15 '50, p48), Lee Skirt Co., of Philadelphia, set up a plan for holding the retailer's inventory on its low-priced skirts; a reorder ticket would bring in a refill from the manufacturer's inventory as a store's stocks gave out. Lee discovered that the reorder tickets just didn't show up—unless Lee's own salesmen policed the stores to make sure that they did. Lee didn't have the kind of money to support this service.

• **Suspicion**—There is a catch, too, in the business of switching stock from outlet to outlet, as chain stores have discovered. A retailer views with suspicion any goods that comes to him because another retailer couldn't sell it.

One final hazard is that such a physical counting of goods costs money; it takes trained personnel, and more personnel. It wouldn't be feasible for small customers. But where the sales volume is large, Sportempos feels it more than pays—in bigger sales, tighter production controls.



Automatic Posy Vendor

In Hamburg, Germany, coin vending machines with glass fronts make buying flowers easy. Just stick a coin in the slot and help yourself.

Another reason why Hammermill Bond prints better, types better, looks better

EVEN THE BEST secretary occasionally makes a typing mistake, but we make it easy for her to correct it. The photograph shows Hammermill Bond taking a special shower bath that turns the trick. The surface of the paper is literally being starched like a shirt, (papermakers would say it is being "sized") with a solution that improves writing and erasing qualities.

These qualities depend on the right amount of the right kind of starch in the solution. Too much leads to cracking. Too little leads to ink feathering, pen scuffing, poor erasures. Common practice is to test the starch solution only at intervals. This leaves opportunity *between* checks for trouble to happen.

Spot checks aren't good enough at Hammermill. So we developed a regulator that automatically meters, at every instant, the amount of starch going into the Hammermill Bond sizing bath.

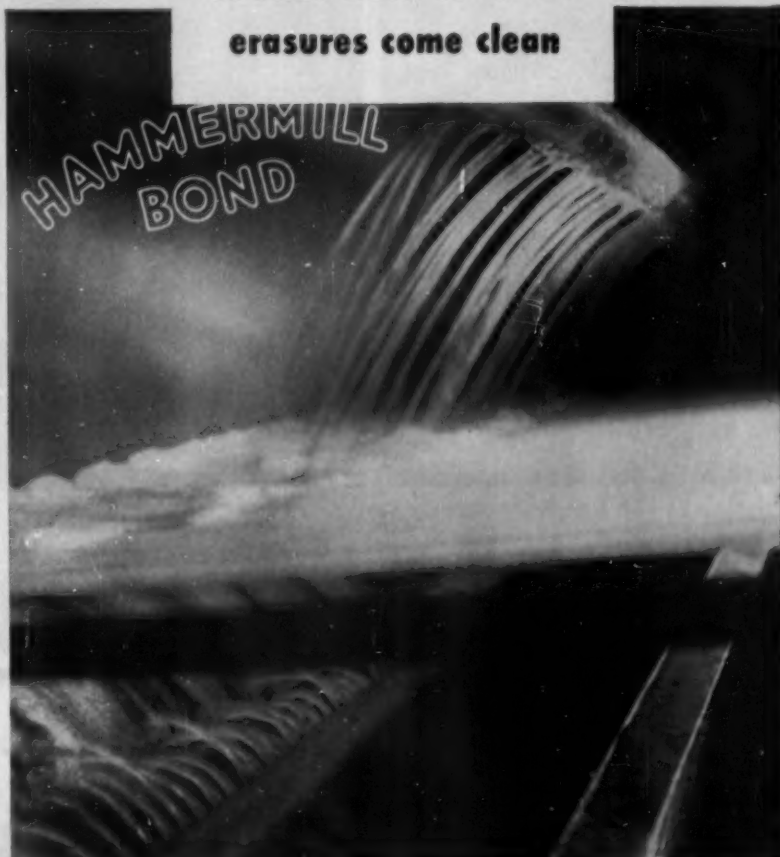
With Hammermill Bond, when your favorite secretary hits the wrong key in the last paragraph of a long letter, she can quickly erase her error so cleanly you'll probably never notice it.

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Hammermill Bond takes shower bath to make erasures come clean



...yet
**HAMMERMILL
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costs no more

—and actually less than many other watermarked papers

MANAGEMENT

1. Institutions own almost a fourth of U.S. business, based on the dollar value of their holdings of all outstanding stock.

The breakdown looks like this:

| | Common | Preferred | Total |
|---|---------------|---------------|---------------|
| | (\$ Billions) | (\$ Billions) | (\$ Billions) |
| Life insurance co's | \$1.1 | \$1.9 | \$3.0 |
| Property-liability ins. | 5.2 | 0.9 | 6.1 |
| Savings, comm. banks | 0.8 | — | 0.8 |
| Open-end trusts | 5.2 | 0.3 | 5.5 |
| Closed-end trusts | 3.5 | 0.1 | 3.6 |
| Corp. pension funds | 3.0 | 0.5 | 3.5 |
| Religious, educational, and charitable trusts | 6.3 | 0.7 | 7.0 |
| Personal trusts in banks | 32.7 | 4.3 | 37.0 |
| Total institutional | 57.8 | 8.7 | 66.5 |
| Individual and foreign investors | 194.2 | 7.3 | 201.5 |
| Total potential market supply | 252.0 | 16.0 | 268.0 |

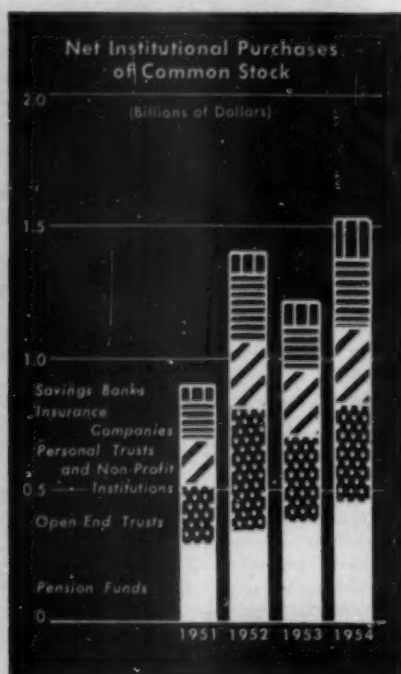
2. Their holdings have been increasing. Since 1952 institutional buyers have been the biggest net purchasers of stocks.

The figures look this way:



3. Among the institutions, open-end investment companies and corporate pension funds do most of the buying.

Here's the breakdown:



Data: SEC estimates as of Dec. 31, 1954, published in the Staff Report of the Fulbright Investigation.

Today's Management: Under New

The figures above point to an important change in the ownership of American industry—a change that has already come a long way and is gathering speed all the time.

The change: More and more of the stock of blue chip companies—the ones that make up the core of the industrial structure—is coming into the hands of professional investment managers of institutions.

The economic importance of this change in the flow of capital is obvious.

What is less clear is that this represents a major social shift, a change in the power relationships within industry.

• **Turnabout**—This may turn out to be the reversal of one of the great social drifts of the 20th Century. It is a commonplace that the professionalized, nearly autonomous management that's characteristic of many big corporations today results from increasingly wide diffusion of stock ownership. The 19th Century corporation was run by some-

one who held enough stock to consider himself its owner—or by a hired hand who was in no doubt who the owner was. But in recent decades, more and more companies are run by hired professionals who have no real bosses, because no identifiable person or group owns enough of the stock to be a controlling force.

Now once more, but in a different way, corporate managers see the shares of their companies—and votes that go with them—clumping under a new kind

4. Institutions, as of December, 1954, controlled 10% or more of the stock of 93 companies (excluding 41 utilities) among 1,043 New York Stock Exchange companies studied by Hemphill, Noyes & Co.

Here's
the list:

| % owned by institutions | | % owned by institutions | | % owned by institutions | |
|----------------------------|--------|----------------------------|--------|----------------------------|--------|
| Addressograph | 17.0 % | Food Machinery | 11.9 % | Motorola | 10.2 % |
| Allied Stores | 16.7 | Foster Wheeler | 12.1 | National Airlines | 13.6 |
| Allis-Chalmers | 10.6 | Gen. American Trans. | 13.1 | Nat'l Cash Register | 13.0* |
| Alpha Port. Cement | 10.2 | Gen. Portland Cement | 13.6* | N. Y. Chi. & St. L. | 11.6 |
| Amerada | 22.8 | Ga.-Pacific Plywood | 12.7 | North Am. Aviation | 11.3 |
| American Brake Shoe | 10.4 | Goodrich | 20.1* | No. Pacific Ry. | 10.4 |
| American Can | 11.0 | Goodyear | 10.4* | Ohio Oil | 11.3 |
| American Colortype | 13.0 | Grand Union | 17.3 | Pan. Eastern Pipe | 15.8 |
| American Viscose | 14.0 | Great No. Ry. | 14.7* | Chas. Pfizer | 11.0 |
| Anchor Hocking | 12.6 | H. L. Green | 12.3 | Phelps Dodge | 10.5 |
| Armstrong Cork | 16.4 | Halliburton Oil | 12.0 | Philip Morris | 10.9 |
| A., T. & Santa Fe Ry. | 12.7 | Hercules Powder | 11.4 | Pittsburgh Steel | 22.2 |
| Bendix Aviation | 10.0* | Hooker Electrochem. | 14.0* | Pitts. & W. Va. Ry. | 58.7 |
| Chicago, Ind. & Louis. | 16.6 | Houston Oil | 19.0 | Pittston | 47.4 |
| Chicago, Rock Island | 15.5 | Ill. Central RR | 18.0* | Rayonier | 21.5 |
| Chickasha | 15.7 | Industrial Rayon | 10.7 | St. Joseph Lead | 11.2 |
| Colgate-Palmolive | 14.4 | Int'l. Min. & Chem. | 10.8 | Seaboard Air Line | 24.9 |
| Columbia Broadcasting | | Int. Paper | 14.7 | Seaboard Oil | 14.8* |
| A & B | 16.6 | Int. Salt | 11.5 | Sears, Roebuck | 30.3# |
| Columbus & S. Ohio RR. | 15.3 | Int. Dept. Stores | 11.4 | Shamrock Oil | 25.4 |
| Combustion Engineering | 13.7 | Johns-Manville | 17.6 | Thompson Products | 11.2* |
| Commercial Credit | 10.0 | Kimberly-Clark | 15.6* | Union Bag | 15.1 |
| Continental Can | 14.5 | James Lees | 10.5 | Uniq. Pacific RR | 10.3 |
| Continental Oil | 15.7 | Marathon Corp. | 12.3 | United Aircraft | 11.4 |
| Crown Zellerbach | 10.4 | Marine Midland | 15.4 | United Corr. Fastener | 13.9 |
| Deere & Co. | 14.1 | McGraw Electric | 14.4* | Western Pacific RR | 33.8 |
| Delaware & Hudson | 14.9 | McKesson & Robbins | 14.4 | Westinghouse Electric | 10.5 |
| Douglas Aircraft | 10.2* | Merck | 10.9 | Worthington Corp. | 11.6 |
| Fed. Dept. Stores | 11.2 | Mid-Continent Pet. | 16.1 | Yale & Towne | 12.2 |
| Firestone Tire | 10.6* | Minn. Honeywell | 13.5 | Zenith Radio | 12.6 |
| First Nat'l Stores | 11.2 | Monsanto Chem. | 11.3 | | |
| Flintkote | 11.2 | Monterey Oil | 14.8 | | |

*adjusted for stock splits

#Includes Sears profit-sharing and retirement fund holdings

©BUSINESS WEEK

Ownership Tomorrow?

of ownership. Taken as a whole, these holdings are big enough to be reckoned with. This time the concentration is in the hands of professional financial men—the managers of investment trusts, pension funds, insurance companies, and the like. Clearly, this doesn't mean the same thing to corporate management that control of such blocks of shares by an individual would. But equally clearly it does mean something.

The proxy fight over Montgomery Ward (BW-Apr.30'55,p28) reminded

many businessmen how much it might mean. For a while during the fight, it looked as if the institutional distaste for Louis E. Wolfson might be decisive—though it finally turned out that Sewell Avery's margin was much bigger than that. Since the fight, there have been strong, if not conclusive, indications that institutional pressure had a lot to do with Avery's replacement (BW-May14'55,p30).

Be that as it may, the actual and potential influence of institutional stock-

holders on the policies of corporations has become a thing no corporate management feels like ignoring.

1. How Did It Happen?

It's not difficult, really, to see why all this is true. A part has been played by the tax laws, the professionalization of management, a dozen years of inflation, and the drive toward a welfare state—both in government and industry.

These forces—plus others—have made it relatively less desirable for investors to buy a company's debt, relatively more desirable for them to buy ownership. At the same time, they have held down

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MAKING CASTERS SINCE 1900 • MAKING CASTERS SO FINE

the amount of new ownership—common stock—that has been available in the market. And they have generated wholly new concentrations of capital that must be put to work promptly and efficiently so that they will yield, some years hence, the pensions, welfare benefits, and unearned income expected of them.

• **Pensions Fourfold**—Consider pensions trust—perhaps the most spectacular of the institutional investors who are buying so much ownership of American business (BW—Apr. 2 '55, p77). Before the war, few U.S. workers had pension programs operating for them. Today, a great many do—and more are covered each year.

In the past five years, the stockholdings of trustee funds—only one-fourth of all pension programs—have quadrupled to \$3.1-billion. To be sure, this is only 1% of the market value of the stock of American business. But in the same period, the amount of stock available for purchase increased much less sharply—a 33% increase in number of shares listed on the New York Stock Exchange, for example. Project those growth rates for a decade and pension funds become much more formidable owners of American business than they are now.

Widely, the same situation is true of other institutional investors. It's just that they're much less spectacular than pension trusts. And for some years, at least, they probably won't pile in so much new capital so fast. That's because the corporations that back the pension funds are taking advantage of the good business and the high taxes of the 1950s to fund their past-service pension obligations at a rapid rate.

II. Ownership vs. Control

It's true, of course, that ownership doesn't necessarily mean control. And officers of institutional investors insist that their ownership won't seek control, regardless of how great their holdings in American business become.

You'd expect this reaction, of course. For "Wall Street" has long been a classic American epithet. And many an American politician has gained power by stepping on the faces of "Wall Streeters." Even today, a Senate committee is preparing for an investigation of investment companies. Groundwork for this probe will be completed for full-dress hearings next year, when it happens that a Presidential election is to be held.

• **Hands Off**—But these professional investors—who manage the \$58-billion that institutions have already invested in common stock and who decide where to put the estimated \$1.5-billion per year that's being added to that total—aren't just being careful when they dis-

claim any possibility that they could control American industry—even if they wanted to and owned enough of it.

They make these arguments:

• Even if institutional investors as a group should accumulate statistical control of business, the shares would be held in such small lots—by so many institutions whose investment policies, responsibilities, and philosophies are so divergent—that the control couldn't possibly be voted as a unit.

• Professional investors are just what their name implies. They are managers of investments, not managers of steel mills or box factories or machine-tool plants. They have neither the knowledge nor the time to manage American business or to control those who do.

• There is small unanimity of opinion among professional investors and even less intercommunication. Without both, there could be no effective collusion.

• Institutional investment is sophisticated investment. As such, it impels better managerial performance simply by its ability to withhold financial support in a fast-growing economy. The better the management, the less need there is for anyone—creditors, owners, or government—to exert outside control.

• Finally, these men argue, there already exist numerous controls—some statutory, some merely their own operating policies—that force a wide diffusion of institutional common stock investment among many companies.

III. Ways of Investing

One thing that bears out these arguments is the vast divergence in investment philosophy. This is true not only among types of institutional investors—trust departments of banks and common stock mutual funds, for example. It is to be found as well between particular mutual funds, and between particular pension trusts.

• **In and Out**—Some substantial mutual funds, for instance, describe themselves as purely transitory investors. Their sole interest is the relative price and the relative value of a stock. At one point in this interrelation, they want the stock, buy it as rapidly as possible without boosting the price. At another point, they don't want the stock. Then they dump it, as promptly as can be without lowering the price.

Such investors seek to anticipate broad price movements. They tend to be unconcerned about corporate management. "Short of outright skulduggery," says one mutual fund man who invests something less than \$100-million in common stocks, "the normal behavior of the market affects stock prices more than a good management



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You'll feel "at home" with the smooth service, the modern air conditioned accommodations and the excellent food.

"DRIVE-IN" REGISTRATION at the Netherland Plaza. Register in our parking garage and go directly to your room.

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can raise or a poor management can lower them."

• **Permanent Holdings**—Such an investment philosophy, of course, makes the hair of a bank trust officer stand on end. What's perhaps more significant, it does the same to many other mutual fund men. Some mutual fund people insist they're permanent investors—just like the trust departments of banks. They sell stocks only when the judgment that dictated their purchase has been shown clearly to be wrong. Still others play it both ways.

"There are some stocks I suppose we'll always own," says a Bostonian whose fund has assets of well over \$100-million in equities. "And there are others we sell when we think we can switch to an issue where it looks as if there's a longer ride to be had."

• **Conservative Bankers**—It's a different situation, though, when you come to the investment habits of the trust departments of big banks. These institutions show a much more consistent pattern. That's important, for they manage most of the pension plans that deal in common stocks. Thus, they control by far the biggest slice of existing institutional investment in common stocks. The total is debatable—anywhere from \$33-billion to \$37-billion.

Most trust officers invest the same way—conservatively. They put much less than half the assets they control into voting stocks, though the percentage is rising fast. Very widely, the voting stocks they do buy are the bluest blue chips. You'd think that if any group of institutions ever could get together and pool their voting power to exert control over businesses, it would be this group.

Well, perhaps it would. But the trust officers make this point: They buy few stocks other than blue chips. What makes a blue chip blue is the best management the United States can muster. When a management is producing so handsomely as to be one of the very best in the whole economy, it neither needs outside control exerted on it nor would any sane investor tamper with it. He couldn't possibly improve it; why risk damaging such a management?

• **Insurance Funds**—One thing that might make institutional control of American business much more likely would be heavy investment in common stocks by life insurance companies. That's just not possible today. New York State law, which is substantially the law that governs all U.S. investment of life insurance assets in common stocks, limits such investment severely. As a result, the industry's \$85.6-billion of assets includes little more than \$1-billion of common stocks. That's less than half of what might be legally invested in them.

The life insurance industry is full of people who recall the Hughes investigation in New York half a century back, when the industry felt the lash of government investigation and regulation. It wants no part of any such future treatment. To avoid any appearance of controlling business, it is shy of even the tiny stockholdings it is permitted by law.

• **More Common Stocks**—There's a development, though, that could open the door for heavy buying of common stock by life companies. That's the variable annuity, based on funds invested in common stocks (BW—Dec. 11 '54, p101). As presently being proposed to the New Jersey legislature by the Prudential Insurance Co., the return from such annuities would be tied to the yield from investments in common stocks, which move with inflationary trends as fixed interest investments do not. You can find life insurance men who hope this form of annuity will never become legal—they're wary of common stocks as a life insurance investment. If it did become legal, though, probably most of the big companies would adopt it—sheerly to meet the competition. It would open vast new pension accumulations to equity investment.

• **Company Funds, Too**—There's considerable difference of investment opinion among the people who control pension trusts, too. One of the oldest and biggest—AT&T, with assets of \$2-billion—hasn't a nickel in common stocks. Another, General Electric Co.'s, with assets (including a few related but non-pension trusts) of \$650-million, wasn't even allowed to hold common stocks as recently as 10 years ago; today, it's well along on a planned campaign to get 30% of the assets into commons.

GE's is a self-trusted fund that considers itself essentially a permanent investor. Its research people split up the economy and assay its components. They assign investment quotas to industry groups. Thus far, with almost \$150-million invested in equities, its largest single-company holding is only 0.65% of the outstanding shares—and that's in a regulated utility.

• **East vs. West**—Another factor makes for diversity in the investment philosophy of pension trusts—regionalism. There's a distinctly less conservative approach to the problem, the farther you go from the ancient Eastern citadels of investment banking.

This doesn't mean you must be a New Yorker, Bostonian, Philadelphian, or Chicagoan to do a safe but effective job of investing pension funds. But it's plain that investment officers elsewhere haven't had as much experience over so long a period investing so much money. A big Ohio bank figures it can safely put from 7% to perhaps 25% of pension assets into equities. But a

Los Angeles trust officer estimates that pension trusts there probably average between 40% and 50% common stocks. Some go as high as 60%. Atlanta funds average 33% equity; Seattle, probably 50%.

In San Francisco, a pension trust negotiated by labor and management buys nothing but high-grade bonds. Five pension trusts established there by employers without union pressure average between 25% to 30% common stocks. One banker there who invests for a number of pension funds has raised his common stock sights from 25% to 35% in the past year, figures pensions will average close to 50% in equities in another decade.

• **Waiting**—Not infrequently, around the country, you turn up the feeling that many of the newer pension trusts aren't yet so deeply into commons as they would like to be. They were organized so recently that they found the market too high to plunge right into.

Since they lack either the resources or the nerve to embrace dollar averaging—as GE's fund has—they sit uncomfortably in a rather unreal position: They're awaiting a fall in the price of blue chips so they can afford to buy them. If the blue chips fall, though, you might reasonably expect a serious investment officer to be pondering either fixed-income securities or liquidity.

IV. What's Management?

When you ask institutional investors about their attitudes and performance as common stockholders, you get a whole new flood of argument as to why institutions couldn't possibly control American management even if they did own American business.

• **Sacred Duty**—They start with the assertion that, very widely, institutional investors already do vote the stock they hold. Many professional investors consider this almost a sacred duty. Only a few say they refrain from voting when there's a dispute—or when an issue arises about which they're not entirely satisfied. Even fewer—and most of these are Midwestern or Western investors—say they vote only if they have substantial holdings of an issue.

Overwhelmingly, these same professionals concede that they are predisposed to favor management on disputed issues about which they have no firm conviction either way.

• **Voting the Stock**—The vast majority of proxies, of course, cover only routine points—such as reelection of directors and independent auditors. But, particularly in recent years, there have been many executive-compensation plans submitted to stockholders. These the professionals always scrutinize—just to be sure that management isn't getting an



Unit Air Conditioners



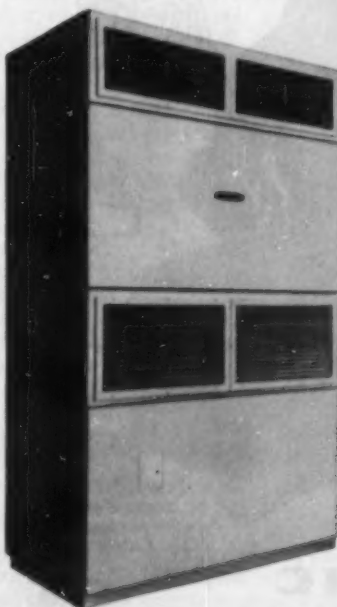
A Frick unit maintains uniform temperatures in the gauge room of the Vulcan Machine Co.

Serve this busy store, as well as restaurants, hotels, offices, factories and many other businesses, everywhere. Note how neatly the conditioner was adapted to the layout of the store through duct-work: this is typical of the complete engineering service you get with Frick equipment.

Frick air conditioners have many advantages . . . larger cooling surfaces . . . insulated condensers . . . self-cleaning filters . . . heavier, quieter construction . . . three sizes . . . backed by over 70 years' refrigeration experience.

Among the many satisfied users of Frick Air Conditioners are:

- | | |
|-----------------------|---------------------|
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| • Appliance Stores | • Funeral Homes |
| • Banks | • Furniture Stores |
| • Barber Shops | • Grocery Stores |
| • Beauty Salons | • Hospitals |
| • Bowling Alleys | • Hotels |
| • Confectionery Shops | • Industrial Plants |
| • Dentists' Offices | • Restaurants |
| • Department Stores | • Supermarkets |
| • Doctors' Offices | • Tap Rooms |
| • Drug Stores | • Variety Stores |



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spot" is your assurance
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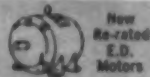
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undue amount of the owner's property. When it's a pension plan for hourly and non-executive salaried workers, however, they go along automatically. That, they'll all tell you, is purely management's problem, and if management can live with it, the stockholder must.

Almost universally, these professionals assert, an institutional investor won't argue, or plead, or insist that management desist from some course to which the investor objects. The only recourse, they say, is to sell—as quickly and with as little impact on price as possible.

• **Time to Fight**—Having told you this, many institutional investment officers will give you examples that tend to impeach what they've just said. It's not unheard-of for a substantial institution holder to change a management's mind on, say, its dividend policy. Fifteen years ago, one of the largest mutual funds thundered so long and so loud about a proposed stock exchange by one of its companies that the deal fell through.

Whenever there's a revaluation or redistribution of assets, of course, the institutions are active indeed. Understandably, they fight to get the best deal for the holdings they represent—no man handling other people's money could properly do less. There have even been cases where trust officers controlled several different classes of securities in one company—and voted them against each other as the best interests of each security dictated.

• **Forced to Hold**—Sometimes, too, the institutions can't sell readily—either because they own too much stock to be moved rapidly without price erosion or because they're locked in at what they consider an unreasonably low level.

For example, a big mutual fund had wanted for years to sell its Montgomery Ward holdings—but not at the market then. In the Wolfson-Avery fight, it refused to vote for either side, but happily peddled a huge portfolio at the best prices obtainable in years. Many banks seized the same opportunity to get out and avoid choosing either group.

V. Who Runs the Show

Institutional investment officers offer all manner of justification for their refusal even to try to influence management—other than on matters directly affecting dispersal of the assets. They'll tell you that they have neither the time nor the talent to manage, that managements can't help but be better equipped to manage.

They concede that there's a line—which zigzags wildly and is only micro-inches wide—between (1) problems with which no intelligent investor would meddle and (2) problems with

which an intelligent investor quite properly could deal vigorously. It's a boundary they sense rather than see. But when they get close to it, they sell if they can't abide management's position.

• **Security Analysis**—Institutional investors get closest to this line, perhaps, in their contacts with management. These they seek—early and often and in great volume. They maintain staffs of analysts who visit companies in which they have—or are considering—investments. Widely, managements call on institutional investors to keep them acquainted with their companies' plans, progress, and outlook. One mutual fund visited 90 companies in the first five months of 1954. Another averages perhaps four visits per week from managers who are in Boston on business.

The point of it all, of course, is continuing supervision of investments. Institutions are accumulating money so fast, they must have acceptable new issues at hand all the time. The GE pension fund, for example, has to invest \$2-million per week to keep up with its accretions.

• **Putting Money to Work**—Another motive for this study of companies: The investment business is competitive as can be—both in getting funds to invest and in getting issues in which to invest. This may bring a sardonic laugh from those corporate managers—a vast majority—whose securities are not on the "acceptable" lists that institutions maintain so carefully.

But it remains true. One big reason is the tax law. It almost compels management to sell debt rather than equity securities—if it can—when it wants to raise some cash. You have to earn more than \$2—based on a 52% tax rate—to pay a common stockholder \$1 in dividends. But the interest you pay on a bond may be deducted as an operating expense before taxes.

With institutional investors demanding only the best corporate equities—and with the best corporations so unwilling to sell new equity issues—you find intense competition for those that do come on the market.

• **Getting Hotter**—As more workers are covered by pensions—and particularly if variable-return annuities open more of the vast capital accumulations of life insurance companies to investment in common stocks—the institutional scramble for acceptable issues will become a rat race indeed.

Indeed, it's showing up already. A Texas trust office says the pressure for common stock investments has forced his bank to downgrade its buying a bit. He no longer insists on "royal blue" chips, but will settle for "robin's egg blue." Atlantic Coast trust officers, though, snort at the idea.

• **Directors**—Another place where investor opinion is fairly fragmented lies in corporate directorships. Some institutions flatly forbid their people to accept any such posts. Others let their people hold them more or less widely. Many say they have no policy one way or another. Even more say they permit it only in exceptional cases.

Mostly, the reason given for a ban is that it takes too much time to be a director these days. However, one sage of the mutual fund industry thinks there are cases where investors must prudently place a man—not a professional investor but an impeccable public figure—on a corporate board to let the institutional investor's position be known. But they limit themselves to one man, he warns, and never attempt to get control of the board.

"Of course," he adds, "if the situation which makes all this necessary is intensely dominated by the management, it is often wise to put two such figures on the board. That way you can be sure of a second for your motions."

VI. What Next?

The growth of institutional equity investment leads inevitably to the question that management is asking: "What will it do to us?" Under the present conditions, and taking institutional investors at their word, the answer is "not much."

Nevertheless, institutional ownership of U.S. business is still young, and policy is still being formed. The new concentration of stockholdings has so far been passive, but will it stay that way? You can foresee pressures that could modify this passivity:

• Suppose, for example, that institutional funds continue to grow faster than the supply of blue chips securities, and the fund managers have to go deeper into the off-blue chips. Might the funds then try to put blue chip executives and policies into the less successful companies?

• The institutional investor today says he's not qualified to advise company management. But might he tomorrow insist on wider use of management consultants?

• If large holdings of a company's shares are in the inactive hands of institutions, might it be easier for an individual outsider to gain control of the active voting shares? Would the institutions, in self-defense, have to abandon their neutrality? Would they then consistently vote to freeze existing management into power?

• In a business slump, could the institutional investors afford to maintain a hands-off policy toward corporate management? Would they be tempted to enforce favored ways of coping with the downturn in business?

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COST CUTTING



Valve Lubrication: Investment in Economy

A southwestern chemical process plant recently came up with some valve cost findings that should be interesting to any process or manufacturing plant management.

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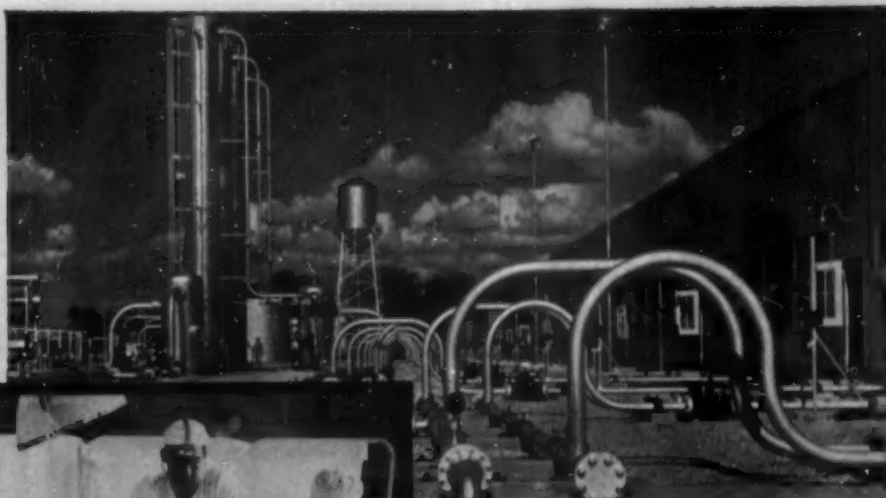


Kashi Ram is an Indian Rhinoceros at the Chicago Zoological Park, Brookfield, Ill. He's 5' 10" high, 12 feet long, and weighs 4,000 pounds. United States Steel built and erected the rhinoceros-proof fence at the front of Kashi Ram's cage. The bars are 1½" (outside diameter) extra-strong pipe welded through heavy steel channel sections.



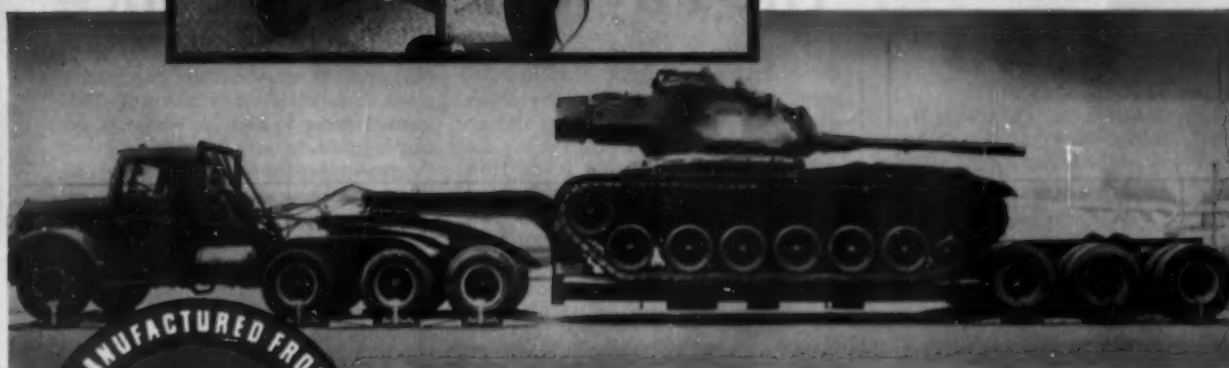
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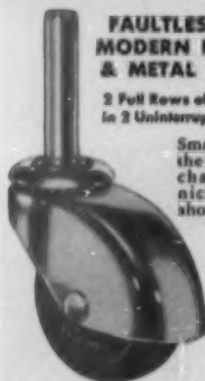
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MIDDLE-LINE MANAGEMENT men, ending year-long development course at MIT, agree that . . .

The Pay-Off Is Confidence

There aren't too many executives these days who'll argue that management down the line in most companies does not need special training and attention. You meet up with the big dispute when you come to the point: How should you provide this special training and attention? And the question that sets off a good deal of headscratching and hot words is: Does any good come from sending your up-and-coming men to long outside courses on management development?

Last week, executives got partial answers to those questions. They came during a week when college graduations were as numerous as adjectives in a commencement address. The graduation that was of particular significance was held in Boston.

There, some 30 men, ranging in age from 29 to 43, tucked newly won Master of Science in Industrial Management degrees into their brief cases. They were the 24th class of Alfred P. Sloan Foundation fellows. They had spent all their time since last fall at Massachusetts Institute of Technology's executive development program. Through that time they were completely divorced from company affairs.

• **Long-Term Investment**—The Sloan fellows were drawn from the middle ranks of industry—their companies had spotted them as men in whom it was worth investing a year's salary without the promise of an immediate return for the money.

The program in which they joined is probably the oldest of its kind in the country. Prof. Erwin H. Schell, whose course in administrative philosophy still ranks high with the students, started it in 1931 with the help of Lamont du Pont, F. Right Fabian, and Charles A. Stone. In 1938, the Sloan Foundation began bolstering the program with annual grants that have now reached a total of \$170,000 a year. The companies from which the students come pay MIT \$2,900 for each man.

After a year out of touch with the boss, this year's class was anxious, even eager, to head home. But, before they went, class members spent two and a half hours sizing up the year just gone by with faculty members, including Dean Edward P. Brooks.

Their reaction boiled down to this:

It had been a year packed with classes and reading, dinners and talking, field trips, thesis writing, and parties. It was

neither a vacation nor a business trip. And, at the end, they were sorry to leave.

• **The Biggest Gain**—They felt that more than anything else, the year had built self-confidence into them. They felt better equipped to get along with people, to formulate ideas readily, make decisions quickly, and to understand the complex of activity within a company.

When you look at the Sloan fellows' backgrounds, their emphasis on self-confidence seems a little strange. Though by no means top management, most of them come from solid line jobs in big companies, and their salaries (which they continued to receive as MIT scholars) range from around \$6,000, in utilities companies, to almost \$18,000, in aircraft and auto companies.

Most agreed that self-confidence was what they needed, and they said theirs got an extra boosting from MIT's dinner meetings, where, over cocktails and food in a small room, the men met and talked straight from the shoulder with visiting top executives.

Said one student: "You told yourself, 'I can develop into that man's position.' In other cases you felt, 'I could be that man tomorrow.'"

This was the way the men reacted to other parts of the course:

• **Field trips**, especially one to New York, were rewarding. "The most interesting people turned out to be the top executives or the men near the very bottom of the ladder—production foremen, for example."

• **Academics** they rated more important for its side effects than for acquisition of knowledge on the subjects they covered. They got no more than a taste in any one field—national policy, economics, labor relations, law. But at the end of the year they felt they could read more intelligently, knew where to find answers.

• **Social Affairs**, which MIT encouraged, forced wives to entertain on a scale they were unused to. "You could see how the gals from the small towns changed through the year. They were scared to death of this aspect when they arrived. But they learned to entertain a group of 60 or more."

• **Counter-Currents—Reactions** were not all rosy. One aspect of the year-long course drew criticism, and another led to uneasiness.

Thesis writing, they felt, wasted a lot of their time. And they labeled exam grading "infantile."

The undercurrent of uneasiness was put tersely by one of the students: "We've been playing marbles for fun here, not for keeps. I'm wondering what's been going on back at the company." This was a general reaction. They felt that they had been away a

little too long—despite the opportunity the MIT course might give them for advancing within their companies.

• **Sharper Attitudes**—But, in the end, what seemed to count most was the way the course refined their attitudes toward their jobs, and these were the comments they made on this:

"I know now there is no single best way to solve a problem."

"Your job as an executive is not to impose on people, but rather to persuade them to do things."

"You usually get more fruitful conclusions out of group or committee discussion than from single-handed thinking."

"We have a greater desire for responsibility—also for a higher standard of living. We want to get in and see what we can contribute."

"I don't think it's bravado, but we're not awed by top management any more."

MANAGEMENT BRIEFS

Staggered election of directors was back in court last week. The Illinois Supreme Court refused to reconsider its ruling that Montgomery Ward & Co. must pick a full slate of nine board members each year, thus upholding Louis E. Wolfson's original victory (BW—Feb. 12'55, p80). . . . In Philadelphia, a stockholders committee asked a federal court to void Pennsylvania RR elections of the past four years and to order a special election to pick full 18-man slate to serve until next May. The Pennsy elects three directors each year.

Standard Oil Co. (Indiana) is changing its 1950 employee stock purchase plan. A somewhat complicated formula is being replaced by this one: For each dollar an employee saves (up to 6% of his total pay) the company will contribute 50¢ worth of Standard stock. The employees' contribution can be used to buy either savings bonds or company stock. The plan is similar to those offered by Ford and General Motors to the United Auto Workers (CIO).

Champion Paper & Fibre Co. is going all out in a new supervisory training program starting next month. It has created a Chapaco Council, to be held each summer at Lake Logan, N. C., to which half of the 1,000-man supervisory force will go for a discussion of top management thinking and company problems. Those attending this year will indoctrinate the remaining supervisors, who will attend the three-day summer meetings in 1956.

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BUSINESS ABROAD

World Bank Looks At Its World

● International Bank finds its member nations—and customers—in the best shape they've been since World War II. And their prospects are good.

● The bank's own lending, reserves, and earnings are at a peak—and private investors are coming in more and more on bank deals.

● Member nations—56 of them—find bank's projects are raising production and living standards.

If you're looking for the sunny side of the world, talk to its bankers. The International Bank for Reconstruction & Development is just winding up its ninth year. Pres. Eugene Black and his staff have learned about the world's money markets, and the business of economic development, the hard way. Their view, from World Bank headquarters in Washington, is one of confident optimism.

It has been quite a year for the World Bank, the biggest ever for the finance corporation, credit union, and economic adviser to 56 nations. Lending, reserves, earnings are at a peak. So is the respect in which the bank is held both by hardheaded investment bankers and economic planners. Here are some highlights:

• Loans this week to Austria and Colombia bring this fiscal year's lending to over \$400-million, the highest so far; loans outstanding total \$2.3-billion. New loans for nations that never before qualified are coming soon—encouraging in a business whose problem has become one of finding sound loans, rather than finding the money to finance them.

• World Bank earnings will hit a record \$24-million this year, up 20%. Reserves are climbing, and repayments—some of them ahead of schedule—are showing up in the till.

• Private investors, in the U. S. and abroad, are taking a more active part in World Bank operations. Hardly a loan goes by now without some private participation, usually on an unguaranteed basis. World Bank bonds are tagged with the highest ratings. The bank's own baby—a plan for an International Finance Corp. to spur venture capital abroad—sailed through the Senate Finance Committee last week.

• Throughout the world, hundreds of bank-financed projects are slowly

beginning to increase the productive capacity and the living standards of member nations.

I. Expansion—on Schedule

The World Bank is very much in and of the world; its opinions reflect the myriad problems and possibilities of every nation. Last week, World Bank economists scanned their vast bailiwick and found the outlook promising.

The postwar, and Korean, readjustments have come and gone. There's a rough balance in price, supply, demand. The industrial nations are busily at work, and once again exporting capital; the underdeveloped nations are driving hard for development. Given relative political calm, the World Bank sees neither great economic catastrophes, nor wild windfalls.

• **The Course**—Entering its 10th year, the bank sees itself expanding right along the lines its creators mapped out. Their idea was to lead the way for private investment in international economic development. By erecting the bare bones of development—the railroads, dams, power projects, highways that private capital hesitates to finance—the bank would create a framework within which private capital would once more flow round the world.

One aspect of the bank that its founders perhaps did not foresee is its role as the objective, respected arbiter of economic development policies. That respect is sometimes grudging: Many a would-be borrower with a pet project—its own sovereign nation and part-owner of the bank—has found the bank digging in its heels and insisting: "No reforms, no credits."

Now the bank is building an educational institution to share its nine years of experience. Next January it will open an Economic Development Institute,

to train picked officials from member countries in the ABC's of progress.

The World Bank's confidence in itself—and the world's confidence in it—were slow to mature.

The founders, to be sure, had great confidence. Victory seemed assured when 44 nations gathered at Bretton Woods, N. H., in mid-1944 to blueprint the postwar world's economic relationships. They saw in the plan for the World Bank an organism that could help finance reconstruction, then push on to develop backward economies. Private capital would surely follow along.

• **Shareholders**—Forty-one nations were shareholders when the bank began business in June, 1946. Authorized capital was \$10-billion, with subscriptions according to a member's ability to pay. Each subscription was divided into (1) 2% in gold and dollars, freely available for lending; (2) 18% in the member's own currency, available with the nation's consent; and (3) 80% subject to call to meet the bank's obligations or guarantees. For the U.S., with just over a third of the total, that meant \$635-million paid-in, \$2.54-billion on call. That \$3-billion-plus, and the "full faith and credit" of the United States, are what put the bank in business.

The bank soon found the job of reconstruction far beyond its resources. By the end of 1947, it had loaned over half its immediately available funds—some \$497-million—for reconstruction in Europe. Fortunately the Marshall Plan and its billions came along—and the bank turned to development.

Meanwhile, there were problems of politics and management: Who was to run the Bank? Its directors from all the member countries, the U.S. government, its president? No one quite knew. Then John McCloy and Eugene Black came on the scene—McCloy as president with complete authority, Black as executive director for the U.S.

• **To the Market**—The major problem for McCloy and his vice-president, Robert Garner, was to raise money. And the market was cold. Investors hadn't got over their experiences with foreign bonds in the 1930s; few had even heard of the World Bank. Garner and McCloy went out as missionaries and told them (explaining that the U.S. stood four-square behind the bonds); Black (a topflight bond salesman and former vice-president of the Chase National Bank) persuaded state legislatures to

amend laws that restricted institutional buying of World Bank bonds.

The first issue came in 1947. It wasn't a howling success, but it brought money into the till. Since then, there have been 20 issues—nine in the U.S., two in Canada, two in Britain, one in the Netherlands, six in Switzerland, for a total of \$838-million. Of these, U.S. insurance companies, banks, pension funds hold 59%; investors abroad, mainly in Europe, the rest.

Eugene Black, who became president in 1949, says that he doesn't expect to go to the market this year. One reason is the increasing sales of loans from the bank portfolio, and larger private participation in loans. The total private participation over the bank's life is \$200.7-million; of that \$95.8-million has come in the fiscal year ending June 30.

And the investors seem hungry for more. Two weeks ago, the bank loaned \$70-million for the development of southern Italy, with the Bank of America taking \$5-million. Last week Black reported—with considerable satisfaction—that he had received a cable from a European investor who wanted some of the Italian loan right away.

Another key development in the past year has been nations going to market to sell bonds at the same time they get a World Bank loan. Last December, Belgium raised \$30-million alongside a \$20-million bank loan; in April, Norway did much the same. Both issues went well, and the bank feels it can take some credit for their success.

Today even the London capital market—occasionally a competitor for overseas lending business—feels the bank is doing a first-rate job.

II. Lending Policy

It's almost impossible to assess the bank's record in lending policy. To be sure, there have been no defaults, no extensions. But at this early date that is hardly a guide. Years from now, when economists study the nations that have received major loans, they'll have a better idea of the impact of the bank's activities.

Foreign lending in the 1920s often was made with hardly a fleeting reference to a nation's real ability to pay. The bank's charter is filled with stipulations designed to prevent a repeat performance. It must finance only productive enterprises, and usually only the foreign exchange needs at that. A nation's entire economy must be studied, its credit-worthiness analyzed; fiscal and monetary policies considered. More than once the bank has insisted that a country clean up defaulted debt before a loan can be made.

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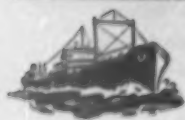
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fore. Now, for example, the bank is relaxing one of its tests. When dollar shortages ruled the world, the bank had to draw a sharp line between dollar and nondollar credit-worthiness and earning capacity. Full convertibility hasn't arrived yet. But nondollar currencies are stronger, trade is flowing more freely—and the bank feels it can be less rigorous in applying the standards.

Look at a sampling of typical World Bank loans: Pakistan, Mexico, Brazil, Thailand for railroads; Panama, Chile, India for farm development; Japan, Italy, Mexico, Brazil, Nicaragua for power; Holland for airplanes, Iceland for a radio transmitter, Peru for port works. In most cases they are basic to the nation's development—in nine years, electric power (at \$589-million) and transport (at \$543-million) have received the most World Bank money.

• **Strain**—Frequently, the bank has sent survey missions to study national economies—and occasionally they haven't come up with a loan at all. Many nations and many projects don't qualify. But the bank keeps plugging, supplying advice, amending projects.

This leads to extracurricular activities, and they strain the bank's staff. It has worked closely, for example, with Iran. Now the Iranians say they don't need a loan, but they do need advice. So this month the bank entered its first fee-for-service technical assistance contract, to supply engineers and advice to Iran's development program. Further East, the bank has been mediating the running—and often explosive—battle between India and Pakistan over the Indus River waters.

• **Oversimplified**—The World Bank has been called too conservative, too restricted to do the job of development it was designed for. To that, the bank retorts that it has discovered that there's a lot more to it than paying for a power plant, or financing a tractor. The nation must know how to fuel and maintain the tractor; it must know how to drive it; where and how best to use it. It's the problem of absorptive capacity—hard to measure, but easily choked by too liberal doses of capital. There's a lot of glib oversimplification about "economic development"—and no one knows that better than the bank.

The World Bank believes there always will be a place for public development financing, even if, as it hopes, private capital takes up a larger part of the job. Outsiders can conceive of the day when the bank is loaned right up to \$7-billion or \$8-billion. But before that, there will be a lot of water over World Bank-financed dams, and a lot more to learn about the business of making deserts bloom with international public funds.

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In Spain, a new pipeline is crawling from Cadiz on the southeastern corner to the northwest, where four U. S. airfields are being built. The POL—Petroleum-Oil-Lubricants—line is part of a . . .

\$300-Million Bastion Rising Behind Pyrenees

Story continues on page 158

Last week a Spanish Embassy official returning to his post in Washington remarked jokingly that there were more Americans in Spain almost, than there were Spaniards. Even Madrid's blistering summer heat hasn't checked the tourist avalanche.

But chattering American girls off to their first bull fight aren't the only Americans in Spain this summer. Some 250 hard-working Statesiders have buckled down to supervising the building of a system of U. S. air and naval bases that will equal the American military installations in Britain. And the techniques they are bringing in with them may have far more important effects on Spain's economy than even the badly needed tourist dollars.

• **Defense Key**—These bases are a key part of the U. S. global defense. They are protected from any sweeping Soviet attack across the plains of northern Europe by the rugged Pyrenees moun-

tains that separate Spain from France. Moreover, there are strong indications that Paris and London are withdrawing their earlier opposition to our deal with Franco Spain for the bases. There is even a strong possibility that Spain will be formally admitted to NATO (BW—Jun. 4 '55, p119).

Directing the actual construction of the bases is J. J. Collins (pictures), chairman of the operating committee in Spain of Brown-Raymond-Walsh, a partnership of three large U. S. construction firms. Collins' job is to see that the bases get built—if possible that they be ready for emergency operation by the fall of 1956 and be fully completed by 1960.

The job is a delicate piece of juggling. Collins works through a line of command stretching from the Defense Dept. through the Air Force, the Navy's Bureau of Yards & Docks and a military command group in Spain. That group



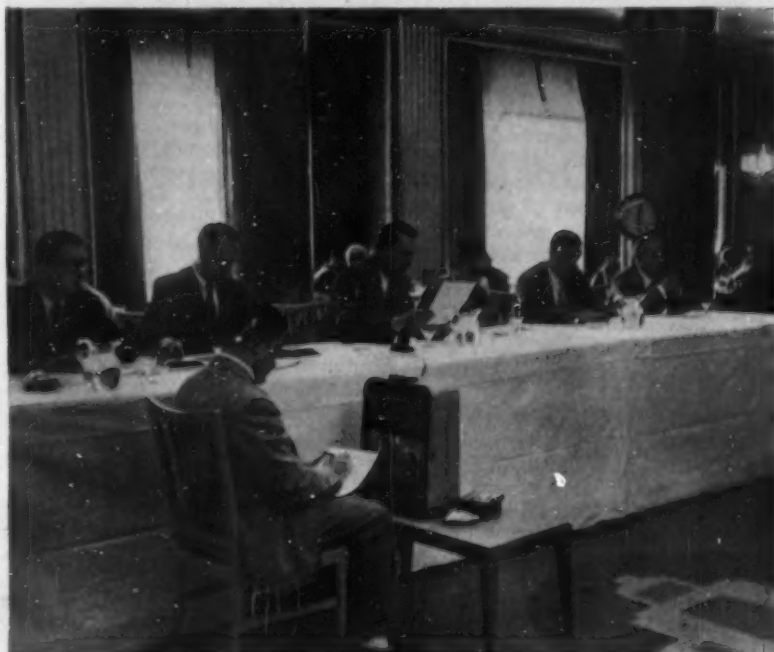
ON THE SITE, J. J. Collins (left), Madrid chief



AT THE OFFICE Collins works Spanish hours: 9 a.m. to 2 p.m.; 4 p.m. to 7:30 p.m.



of Brown-Raymond-Walsh, talks with one of the Spanish workmen BRW is training.



CONFERENCES with Spanish constructors seeking building contracts help Collins decide the delicate issue of which companies are best able to handle the jobs.



CONTRACTS are rushed through, to meet the Air Force's 1956 deadline.

is where he picks up the chain of command, supervising the assignment of subcontracts as the "prime contractor" on the whole project. Under the 1953 U.S.-Spain treaty covering the leasing and building of the bases all contracts possible must go to Spanish companies. The whole project is wrapped up in further complications arising out of Spain's antiquated construction methods and its overtaxed internal transport system.

• **Getting Together**—It all started one day in the summer of 1952, when W. V. McMenimen, former president of Raymond Concrete Pile Co. and now back from partial retirement to head the New York side of the Spanish operation of his company, received a call from the Pentagon. The Air Force was building nine NATO air bases in France in cooperation with the French government. The Army Engineers had also been called in. But the project just wasn't moving.

McMenimen, who had a big hand in building Pacific military bases during World War II, was asked to get together a group of U.S. construction companies that could act as consultants on the program. That's how the BRW group—Brown & Root, Inc., Houston, Tex., Raymond Concrete Pile Co., New York, and Walsh Construction Co., New York and Davenport, Iowa—was formed. Collins, an old friend of McMenimen's and a veteran at Raymond, was chosen to head up the project because of his experience in overseas Latin American jobs.

In France, the BRW group was very successful in walking the thin line between keeping the project moving and keeping off the sensitive toes of French contractors. Collins is proud of the fact that the French contractors gave him a testimonial dinner when the whole job was over.

• **Consultant Plus**—Collins' job in Spain differs from the French program in that the BRW group is now the over-all contractor rather than consultant. It's BRW's job to let all construction contracts for four air bases, a 480-mile pipeline, and port installations at Cadiz on the southeast corner of the Iberian Peninsula, El Ferrol in the northwest, Cartagena on the Mediterranean, and on the Mediterranean islands, the Balearics.

The entire project will probably cost the U.S. more than \$300-million, of which a large part will come from counterpart funds—pesetas paid for shipments of foodstuffs and cotton made by the United States to the Franco government.

Brown, Raymond, and Walsh are equal partners in the operation, and each is represented on the seven-member operating committee in Madrid.

The contracts for actual construction

are awarded to Spanish companies, U.S. companies, or joint U.S.-Spanish undertakings. Collins, in consultation with other U.S. representatives, has the delicate job of making the awards, based on ability to perform, with BRW providing technical knowhow, equipment, and materials. Plans for the bases are being drawn by four U.S. architectural firms—Shaw, Metz & Dolio; Metcalf & Eddy; Frederic R. Harris, Inc.; and Pereira & Luckman—known collectively as AESB, Architects, Engineers, Spanish Bases.

• **Likes the People**—"The attitude that the Spaniards don't know anything and couldn't do anything till we came along is as phony as can be," Collins says. "Their whole difficulty is that they are behind in machinery and have been held down by donkey operations. Soon they'll be pouring 1,000 yards of concrete a day—they don't know it yet, but they will."

One BRW technician estimates that so far the Spanish contractors are operating BRW's \$12-million worth of machinery now in Spain at only 80% of efficiency. "But they're just beginning to learn," he said.

• **Lack of Transport**—One of his greatest difficulties, Collins says, is the transport system inside Spain which has hampered putting the machinery—much of it brought from North Africa where other companies used it in building other bases—into place. For example, it took three weeks just to get information needed to land LSTs at Tarragona on Spain's southern coast. Then the facts were obtained only by sending BRW personnel to the spot to examine the beach, railway facilities, and roads.

Collins' major victory, so far, seems to be that he has broken down the traditional Spanish formality and has worked out a good understanding with his Spanish contractors. He's now on a first name "Jota-Jota," (Spanish for Jay-Jay) basis with many of them. Part of the explanation for his success is a series of morning coffee and doughnut sessions with as many as 200 Spaniards attending.

His success also stems from the fact that his background gives him a good combination of technical grasp and executive polish.

At the hard rock level, Collins worked as a young man as a "sand-hog" building the Hudson & Manhattan Railway tunnels between New York and New Jersey. By the end of 1908, he was a "walking boss" on a similar tunnel project in Detroit. Then his friends (McMenimen among them) persuaded him to go back to school. He graduated from the University of Michigan in 1912 with a degree in civil engineering. Immediately after graduation he joined Raymond Concrete Pile.

Looking Abroad

The week's budget of news about U.S. corporations and their business overseas.

A three-country stock-for-technical-aid deal has been announced in Madras, India. The venture, Carborundum Universal, Ltd., will be managed by Sir Ramaswami Mudaliar, chairman of India's Investment & Credit Corp. Other directors will be the president of Carborundum Co., Niagara Falls, N. Y., and the managing directors of three allied companies in Manchester and Stafford, Great Britain. The U. S. company will invest through its British partners, but 51% of the capital will be Indian. Shares will be given to British and American partners of lieu of fees or royalties.

More food plants for Latin America: The first soluble coffee plant in Central America is under way in San Salvador, El Salvador. It's a joint venture by U. S. and Salvadorean investors aided by Nelson A. Rockefeller's International Basic Economy Corp. Tenco, Inc., Linden, N. Y., will receive 20% of the shares in the new company for use of its processes and technical assistance, Edward Aborn, president, announced. . . Kraft Foods Co. is planning a plant in Venezuela to supply northern South American and Caribbean markets.

Sheffield Corp. of Dayton is taking part in the large-scale expansion of Australia's munitions industry. Its Australian subsidiary, Sheffield Corp. of Australia (Pty.) Ltd., will become the largest tool and gauge plant in the Southern Hemisphere. . . Alco Products, Inc., Schenectady, N. Y., has entered a licensing arrangement with A. E. Goodwin, Ltd., Glebe, Australia, to manufacture diesel-electrics "down under." Alco has 20 diesels now in service in Australia.

Chas. Pfizer & Co. Inc., has formally opened an antibiotic plant at Massy, southwest of Paris. It's a joint operation with its French distributor, Clin-Byla, S. A. . . Monsanto Chemical Co., St. Louis, is adding a sulfuric acid plant to its three diversified plastic manufacturing operations in Mexico. A plant to produce fine chemicals in the aspirin-caffeine class is also planned.

Italy's booming oil industry has lured Dresser Industries, Inc., of Dallas, into signing a contract with a subsidiary of the Italian government oil trust to build drilling rigs and allied equipment in Italy.

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An Airline for Austria

North American dickers for the job; it might ease "non-sked" problem... Japanese tariffs deal... French to build Havana tunnel... Canadian iron ore for Germans.

North American Airlines, the most important of the surviving "non-sked" airlines, was grasping for a new lease on life this week in—of all places—Vienna.

News from the Austrian capital was that after a year and a half of dickering, NAA might be on the verge of an agreement with the Austrian government to set up a national airline for the newly independent country. If the agreement comes through in September when Austria's new state treaty with the Big Four removes all restrictions, it might be just in time to save NAA's skin. The Civil Aeronautics Board has threatened to put it out of business for what CAB calls violations of the functions of non-skeds: (BW—Apr. 9 '55, p. 28).

Jack B. Lewin, president of North American, outlined the Austrian proposals this week as a complete project to set up an international Austrian flag-carrier. NAA would put up planes, technical knowhow, pilots, furnish terminals, and set up ticket offices. The Austrian government would obtain landing rights and permits.

North American would assign its two DC-6Bs, and three it has on order, to the North Atlantic route—Vienna to New York via Paris and, or London. The deal would give Vienna a full-fledged airline in a hurry, something it couldn't hope to finance otherwise.

Nobody knows, whether the CAB would go along with the plan. There is a possibility that North American has more than one purpose in negotiating with the Austrians. Lewin hinted this week that perhaps some of the overseas U.S. flag carriers might use their influence with CAB to keep North American in domestic skies—and out of their hair over the North Atlantic.

North American has plans in that direction, too. It has asked the CAB for permanent certification on four routes and wants to set up an air bus service. But the CAB hasn't acted favorably, and there seems little hope since it has not O.K.'d a new domestic trunk carrier since 1938 despite skyrocketing passenger volumes.

Last week's word from Geneva that multilateral tariff negotiations between the U.S., Japan, and six members of the General Agreement on Trade & Tariffs (GATT) were completed met with different responses.

To American officials worried that Japan may swing toward greater reliance on trade with the Communist world, it was encouraging. Now Japan can enter the GATT trade club this fall if two-thirds of the GATT membership approves—which now seems likely.

Some U.S. exporters were happy. Japan has reduced tariffs on American exports—including autos, lubrication oils, business machines, fruit juices, and lard.

There was even some rejoicing in the U.S. chemical industry, which had expected American reductions on tariffs on Japanese exports of coal tar intermediates to the U.S. They didn't come off. But we did offer reductions on cotton textiles, which some U.S. interests have been dead set against.

It's still too early to tell just what the Japanese reductions and our own concessions will mean—especially since third country deals haven't been announced.

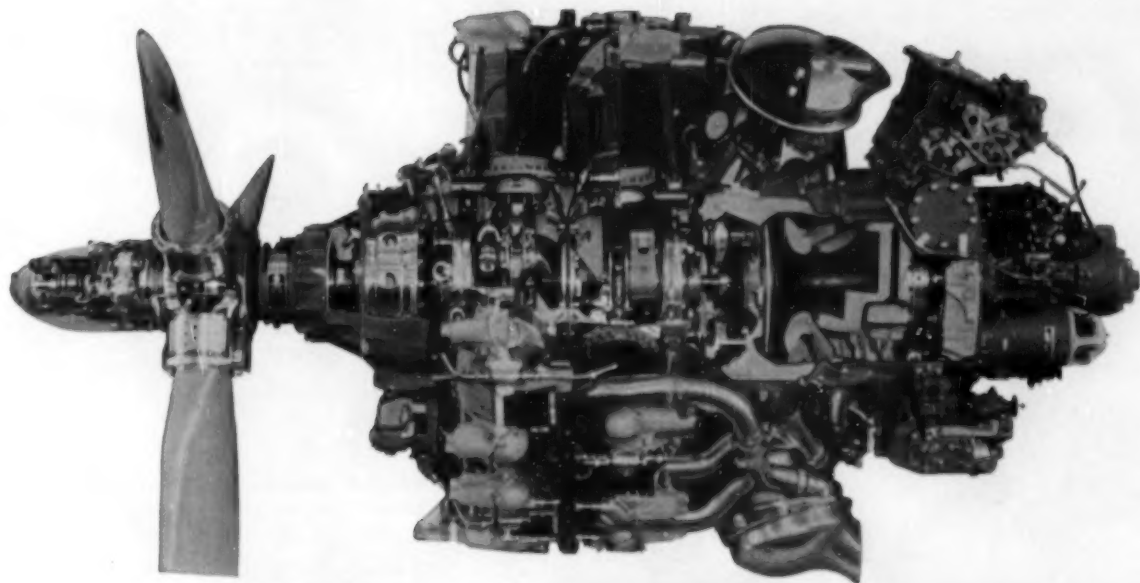
A French contracting firm last week nosed out U.S. competition for a contract to build a multimillion-dollar auto tunnel under Havana bay. But it took some tricky financial maneuvering to accomplish the deal.

The French company, Societe des Grand Travaux de Marseilles, has agreed to buy \$28-million worth of Cuban sugar for the next two years. That's about 45% of the cost of the project. It's understood the French concern will peddle the sugar wherever it can—probably in North Africa.

The whole German steel industry—represented in three different groups—has signed a contract to buy a minimum of 2-million tons of Newfoundland iron ore.

The agreement was reached between German interests and Canadian Javelin, Ltd., headed by John C. Doyle of Greenwich, Conn., Javelin board chairman.

Doyle said the agreement will permit Javelin to finance a new plant at its Wabash Lake deposits out of revenues from German sales during the next three and a half years. Doyle told a stockholders meeting that negotiations are under way to sell to other steel interests in Italy, the Benelux countries, and Austria.

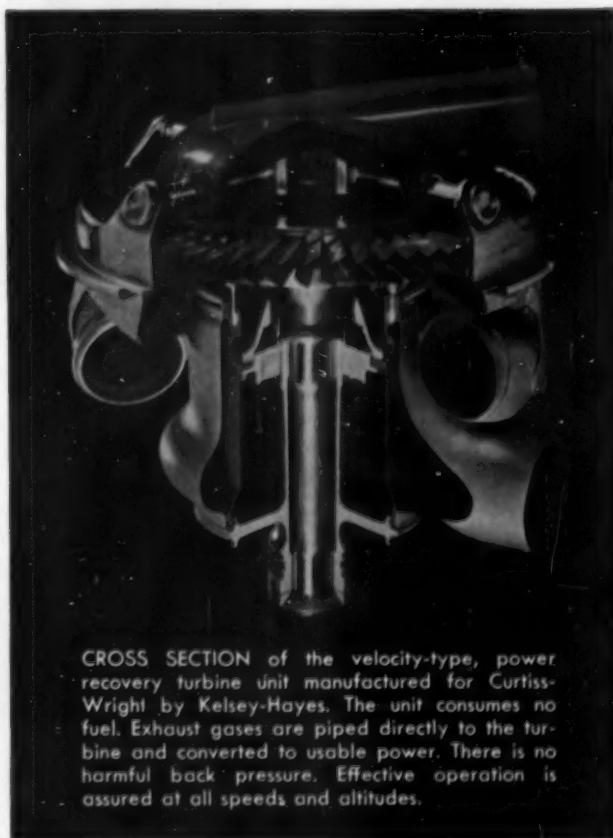


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INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 18, 1955

A BUSINESS WEEK

SERVICE

Moscow won't catch the West off guard at the San Francisco-Geneva peace talks (page 27).

Western diplomats are ready to counter any Soviet proposals—on Germany, European security, and disarmament in general. By the time of Geneva, American-British-French working groups will be ready with:

- A new Western disarmament plan that takes account of (1) nuclear developments both here and in Russia since the Baruch plan; and (2) the apparent concessions made in the latest Soviet proposals. The U.S. has Harold Stassen, the President's Special Assistant for Disarmament, and our delegation to the UN working on the plan.

- A draft for a European security scheme that would (1) put a limit on all European forces, Western and Communist alike; and (2) guarantee European frontiers against military attack. This would be the framework for any German settlement.

Washington doesn't expect to get into these matters at San Francisco. In fact, U.S. officials want to keep next week's meeting limited to procedure—preparing the agenda for Geneva.

It's possible, though, that Soviet Foreign Minister Molotov means to make more of San Francisco than this. He might decide to use the occasion to present new Soviet proposals, say on disarmament. Then he would insist that Geneva will be so short that immediate discussion is a must.

In any case, Molotov is sure to take advantage of San Francisco to gain backing in the UN for (1) Moscow's new, conciliatory policy; and for (2) Red China's immediate admission to membership.

No foreign leader, not even Red China's Mao Tse-tung, has ever been feted in the Soviet Union as Nehru has been. The Indian Prime Minister has even visited Soviet atomic installations.

Clearly the Kremlin is making a big play to get Nehru to be even more "neutral" toward the Soviet bloc. It's possible that Moscow will tempt Nehru with Soviet economic aid.

It would be geared to India's Second Five-Year Plan, due to start next year.

A Soviet aid program for India would be a new departure in Russian policy. To date Moscow has never extended economic assistance to a non-Communist country. If Nehru accepted, it might bring a shift in American policy toward India.

Detroit's annual wage agreements—whatever their effect in the U.S.—are providing a new weapon in the fight against Communist influence in European labor unions.

The Ford agreement, coming first, hit the European headlines. Since then, the development has been a hot subject for discussion in European labor unions, regardless of their political affiliation.

European workers, despite Communist lies, have long accepted the fact that American workers enjoy the highest living standard in the world. But this extension of economic security was something they never thought possible in a free enterprise country.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JUNE 18, 1955

Here is some economic outlook from Europe—and it's optimistic.

The United Nation's Economic Commission for Europe sees the boom continuing. But it notes some qualifications. Sales of consumer durables—which paced the boom last year—may be leveling off a bit. Textiles face heavier going. Meanwhile, major bottlenecks are showing up—in coal and steel capacity especially.

But ECE doesn't seem so worried about inflationary pressures as some other observers. Only in Britain does it see a threat.

This week brought even stronger optimism from the little-known, but highly respected, Bank for International Settlements. (Apart from its banking activities—such as acting as agent to the European Payments Union—BIS is a kind of clearinghouse for economic thinking.)

Europe, says BIS, may be moving toward the greatest economic expansion in its history. There's steady growth in consumption, production, trade. Confidence is high. Fear of getting hurt by U.S. business fluctuations has waned. Indeed, BIS commends U.S. policymakers for their handling of last year's downturn.

The European Payments Union has decided to revamp itself in preparation for the day of convertibility. EPU will continue as is until the end of July—to give the experts time to work out a setup that will permit EPU to function after the British, Germans, Belgians, and Dutch go convertible.

When that will be depends on London. And the best advice you can get is "probably this year."

What is virtually certain is that Chancellor Butler will use a "flexible" exchange rate when he takes the plunge. He feels London needs that, along with its gold reserves, to absorb temporary trade pressures.

Providing for a floating pound is one of the things the experts have to do in revamping EPU. Many Europeans have said that this would wreck the whole operation.

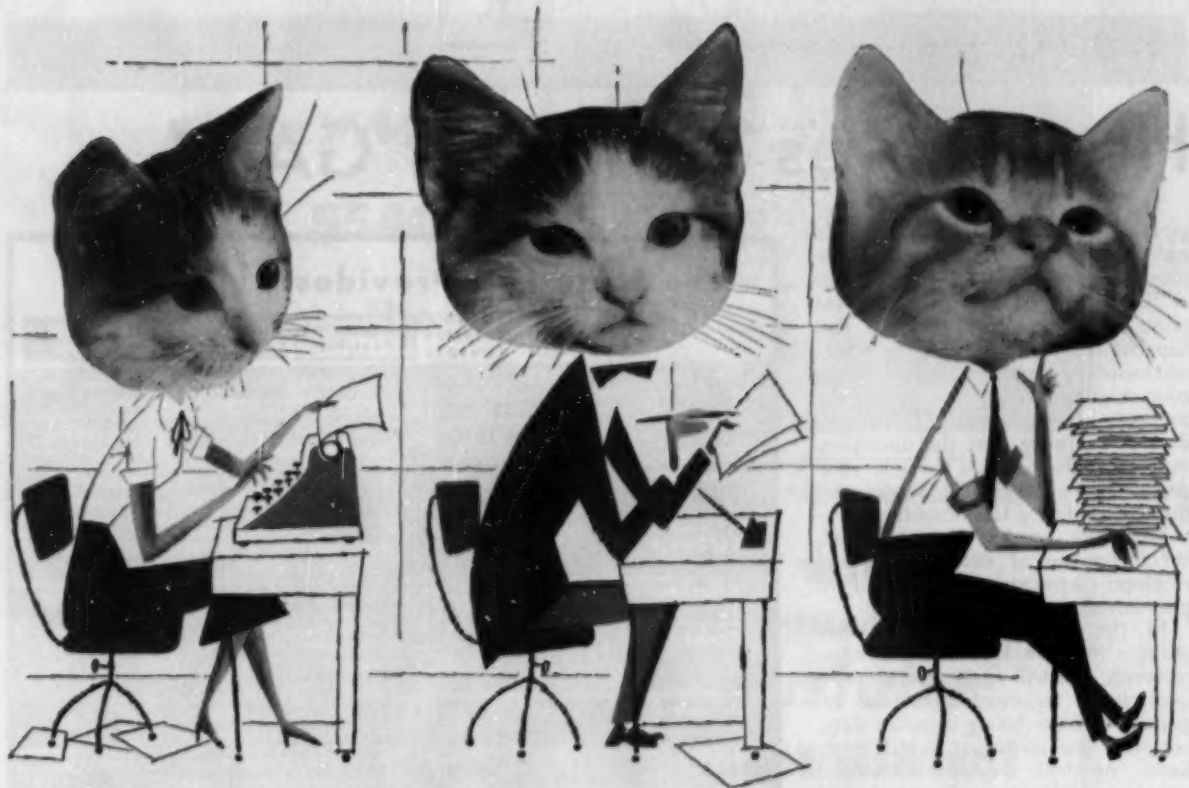
But Butler has agreed to (1) inform the revised EPU management every month in advance between what upper and lower limits sterling would be allowed to fluctuate; and (2) settle balances with EPU monthly at the lower limit.

The anti-Church campaign in Argentina could affect U.S. policy. For two years now, Washington has buttered up Pres. Peron, encouraged investment, tried to let bygones be bygones. But if persecution of Catholics continues, public opinion here might force a harder line.

The situation in Buenos Aires this week is serious; there's no likelihood now that the battle will blow over. Argentines aren't considered the kind who would take to the barricades in defense of the Church. But you can't rule out violence completely.

Nor can you rule out the chance that Peron, for once, has gone too far. Opposition to his regime has been fragmented, powerless. But the present fight might be just enough to touch off a coup—probably from the army—against him.

There's this to remember: Juan Peron has gotten out of some tight spots before. Don't be surprised to see him do it again.



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LABOR

How States Can Limit GAW

The CIO United Auto Workers' great triumph in the Ford and General Motors contracts—the establishment of what it views as the principle of the guaranteed annual wage—could prove to be an empty victory. If that happens it will be because the states, administering their own unemployment compensation laws, refuse to let the contracts become operative. They can do this by ruling that the unemployment pay-outs to which the auto companies have agreed are wages and thus bar or reduce UC benefits.

Most state laws, as they now stand, bar integration of state benefits and employer payments, which the Ford plan envisions.

In the looming controversy over changes in these laws or their interpretation, you will again see the usual spectacle of organized labor and organized business taking opposite sides, but with one important modification. Some important employers will stand with the unions, asking liberal application of the laws. There is an uneasy feeling in Detroit that if the states don't go along, bargaining will have to start all over again and that the long and bitter strike, so narrowly averted, will become a virtual certainty.

• **Roundup**—Just where the situation now stands is revealed by a BUSINESS WEEK survey that reached into every state capital this week. It shows that:

• In only six states—Massachusetts, New Jersey, New York, Pennsylvania, Washington, and New Mexico—is there an apparently clear way for integration of benefits. Even so, revisions in policy, perhaps even in present laws, may be necessary. If so, indications are that the changes will be expedited.

• In 27 other states, officials have little or no doubt at this time that legislatures (many of them not scheduled to meet before 1957) will have to revise UC laws. In one important state, Ohio, the Senate this week refused to take up an enabling amendment. In 17, and possibly in two others, present laws appear to require that any employer-financed supplement be deducted as "wages" from the amount possible as a state UC benefit.

• In 11 of the remaining 15 states, officials believe that administrative decisions will determine whether legislative action will be necessary. The four exceptions are states in which there has been, as yet, no reportable decision on the question.

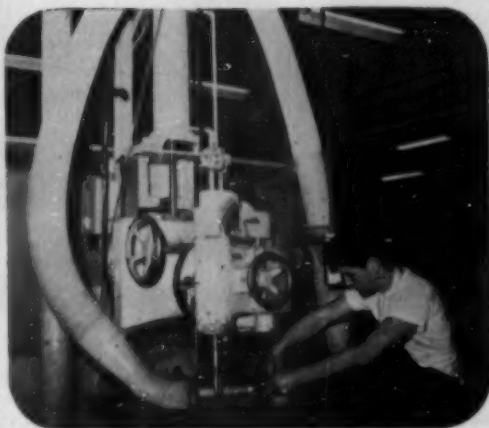
• **Decisive**—The big state, the one

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| | Maximum Benefit | For This Duration (weeks) | Integration Possible | Hinges on Policy Ruling | Law Change Indicated |
|---------------|-----------------|---------------------------|----------------------|-------------------------|---|
| Alabama | \$22 | 20 | | | Any money paid by employer must be deducted from amount from state. |
| Arizona | \$30* | 26 | | | Rule on severance pay applies to supplement; whatever is received is deductible. |
| Arkansas | \$26* | 18* | | | If money from auto fund is regarded as "benefits" not "wages," integration is possible. |
| California | \$33* | 26 | | | Apparent conflict between UC law and supplement plan. |
| Colorado | \$28-\$35 | 20-26 | | | No supplementing of UC permissible; anything paid will be deducted. |
| Connecticut | \$35 | 26 | | | Law bars UC to anyone who gets "wages" or "any . . . compensation for loss of wages." |
| Delaware | \$35 | 26 | | | No decision, but attorneys see changes in current policies necessary. |
| Florida | \$26 | 16 | | | Any money payable from auto trust fund would be deductible from UC. |
| Georgia | \$26 | 20 | | | Any money payable from auto fund in excess of \$5 would be deductible. |
| Idaho | \$30* | 26 | | | Up to \$15 earnable without UC loss. |
| Illinois | \$27 | 26 | | | Auto supplement considered "wages" under law, and all but \$2 would be deductible from UC. |
| Indiana | \$30* | 20 | | | Employer-paid benefits for unemployment are "pay for idle time," deductible from UC. |
| Iowa | \$30* | 24* | | | Any money paid by employer in excess of \$3 must be deducted from UC. |
| Kansas | \$32* | 20 | | | UC is barred to claimants receiving "wages" from any source. |
| Kentucky | \$28 | 26 | | | No decision, but state "hopes" supplementing UC can be allowed. |
| Louisiana | \$25 | 20 | | | Amendments necessary before Ford-type supplement plan can be integrated. |
| Maine | \$30 | 23 | | | Ford-type supplement plan can't be integrated with UC as law now is. |
| Maryland | \$30 | 26 | | | "Integration . . . not possible . . . if supplement is considered as wages," deductible from UC. |
| Massachusetts | \$25 | 26 | | | Governor "doubts" integration trouble; in precedent case, trust fund payment didn't affect UC. |
| Michigan | \$54* | 26 | ? | | To go into effect, Ford plan must be OK'd here. Decision will be on a "benefits" or "wages" question. |
| Minnesota | \$33* | 26 | | | Law now bars UC to anyone who gets benefit payments from any fund financed 50% by employer. |
| Mississippi | \$30 | 16 | | | "Considerable amendment" will be needed to integrate payments. |
| Missouri | \$25 | 24 | | | UC barred to anyone getting "compensation" from other sources greater than maximum state UC. |

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|----------------|-----------------|---------------------------|---|-------------------------|----------------------|
| Montana | \$26 | 20 | Up to \$15 earnable without UC loss. | | |
| Nebraska | \$28 | 20 | Enabling law necessary, since supplementary benefits would be deducted. | | |
| Nevada | \$50 | 26 | No decision yet. Question is whether supplement is "wages." If so, law must be changed. | | |
| New Hampshire | \$32* | 26 | "Curbstone opinion" is that supplement would be "wages," barring or limiting UC benefits. | | |
| New Jersey | \$35* | 26 | "Nothing to prevent supplementation" of UC, but supplement "might affect the ... benefits" due. | | |
| New Mexico | \$30 | 24 | UC benefits payable even if employers give a supplement. | | |
| New York | \$36 | 26 | No decision pending study of terms, but if necessary changes in law will be recommended. | | |
| North Carolina | \$30 | 26 | No decision; it will depend on whether claimant is "employed." | | |
| North Dakota | \$32 | 20 | No opinion available. | | |
| Ohio | \$35 | 26 | Any money from "outside sources" deductible from state UC; if "wages," then UC is barred. | | |
| Oklahoma | \$28 | 22 | Anything paid by employer in excess of \$7 must be deducted from UC. | | |
| Oregon | \$35* | 25 | UC barred to claimant to extent that he gets severance, vacation or GAW pay. | | |
| Pennsylvania | \$35* | 30* | Auto-type plan "will apparently be workable" here. | | |
| Rhode Island | \$30* | 26 | No decision yet. | | |
| South Carolina | \$26* | 22* | No decision yet. | | |
| South Dakota | \$25 | 20 | No UC if there's a supplement. | | |
| Tennessee | \$30 | 26 | Any money paid claimant in excess of \$5 would be deductible from UC benefits. | | |
| Texas | \$28** | 24 | No decision yet; if fund payment is "wages," UC will be barred or limited. | | |
| Utah | \$33* | 26 | Auto payments would be "wages" under law and would have to be deducted. | | |
| Vermont | \$28* | 26* | Change of law believed necessary. | | |
| Virginia | \$24 | 16 | "Grave doubts" of integration without law change; supplement now deductible. | | |
| Washington | \$35* | 26 | UC won't be affected by GAW supplement if claimant isn't paid "wages." | | |
| West Virginia | \$30 | 24 | No decision yet, but unofficial views are that state law will have to be amended. | | |
| Wisconsin | \$36** | 26 1/2 | Integration depends on whether supplement is "wages," even so, UC might still be payable. | | |
| Wyoming | \$30 | 26 | No opinion available. | | |

*Increases voted in 1955 but in some states not now in effect.

**Increase voted, but awaiting Governor's signature.

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likely to decide the immediate future of the Ford plan, is Michigan, where some 56% of all Ford employees work. The Michigan Employment Security Commission so far has said only that if there is any conflict between state law and auto contract terms, it will be decided by the attorney general if possible, or placed before the next legislative session (in January, 1956).

Because of their importance, management groups opposed to the Ford plan as a step toward guaranteed wages

are centering their attention on Michigan and Ohio. The National Assn. of Manufacturers "alerted" employers of these states to the "American crisis—the guaranteed annual wage" during an "emergency" conference in Chicago on Wednesday. At the same time, other organizations began circulating material critical of the Ford plan in other states in what appeared to be a first stage of a campaign to defeat changes in present UC policies or laws.

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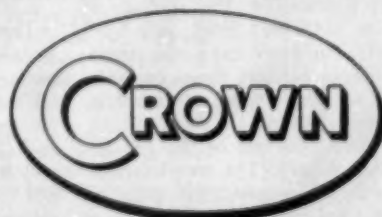


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What Follows Ford and GM?

Detroit looks behind first settlements to see how far UAW can get with "Ford principle" in rest of industry, and what it will have to give up for it.

With the broad outlines of 1955 labor contracts in the auto industry filled in by United Auto Workers (CIO) contracts with Ford and General Motors, Detroit interest has now turned to the questions unresolved by those agreements, and to their effect on smaller car companies, tool and die shops, and other industry suppliers.

A period of anxious waiting came to an end early Monday morning when the GM agreement was signed—and the Ford unemployment supplement plan and 20¢ "package" firmed up for the industry. American Motors Corp. resumed delayed negotiations with UAW on Tuesday, still insisting that this year was the time to end "pattern" bargaining in the auto industry. Dozens of auto suppliers, in negotiations for weeks with the talks dragging, found UAW ready to get down to business now that the outcome of Ford and GM bargaining was known.

UAW's major goal in all these negotiations is now clear: It wants widespread adoption of the "Ford principle" (BW-Jun.11'55,p152). But the smaller companies are by no means resigned to accepting this principle or the Ford way of implementing it. Hard bargaining lies ahead. No one outside American Motors takes seriously that company's insistence that it will sign no more "pattern contracts"—if the pattern referred to is the Ford supplemental unemployment compensation plan. AMC and other companies will probably have to sign for some form of that plan in the end, but Detroit observers are now watching to see how much UAW will have to give up because of its insistence on the Ford plan.

I. The GM Terms

A clue to UAW's bargaining position, and an indication that it's not so strong as appears on the surface, is present in both the Ford and GM settlements. In both cases the union had to accept company terms on practically all economic matters to obtain what Walter Reuther, UAW president, insists is the "principle of the guaranteed annual wage." (The supplemental unemployment compensation plan in both the Ford and GM contracts is almost precisely in the form in which Ford experts originally wrote it.)

The GM contract, in the general provisions that apply to both companies,

is identical with the Ford agreement—three-year term; vesting of pension credit; higher pension payments; higher health benefits; an improvement factor of 24% compounded annually; wage escalation based on a half-point movement of the cost-of-living index.

• **For GM Only**—On some points peculiar to GM, there were differences. GM gave UAW a complete union shop (formerly, contrary to industry practice, GM did not require present employees to join the union, and any new employee could resign from the union after one year without losing his job). The most likely reason for the change is that GM accepted a fact, while retaining mental reservations on the theory.

GM agreed to slightly higher wage increases for skilled employees than Ford workers got, and the corporation also signed for so many changes in working conditions that Reuther said UAW obtained "more improvements in working conditions than in all agreements combined since 1941."

• **Strong Feeling**—GM gave in with bitter reluctance on the unemployment compensation issue. The extent of the feeling against this principle and against Ford for accepting it was apparent in remarks of GM officials. Harry Anderson, vice-president for industrial relations, said to Reuther: "Walter, we had a lot of disagreements in there about that one [the Ford unemployment compensation plan] . . . and I do want to congratulate you on your judgment in going somewhere else first to get it." A free translation would be that UAW would never have won acceptance of that principle from GM alone.

This was indicated, too, by Pres. Harlow H. Curtice's comment: "We still hold earnestly to the belief that the responsibility for such matters as the amount and duration of unemployment compensation benefits rests with . . . the various states" (page 166).

• **How New?**—What GM is—and has been—saying is that business already is paying unemployment benefits to laid-off workers, and there is no reason to change the procedure under which such payments are made. Ford people will tell you privately that they have not established any new principle, but merely augmented the same philosophy in which GM believes.

Ford people have been careful to give the impression, without actually saying so, that they do not believe Reuther

has established "the principle of the guaranteed annual wage," or anything remotely resembling it—even though Henry Ford II has admitted that Ford has "gone part of the way down the path toward the principle." Ford people believe they made a good deal, because if the GAW issue had never come up they probably would have had to pay out considerably more than 5¢ in an across-the-board wage increase. As it turned out—excluding the skilled trades increase and the 5¢ that was already in the improvement factor—the actual general wage increase ranged from 1¢ to 3.5¢ an hour.

II. Repercussions

This is where some Ford people believe Reuther made a long-term mistake, and it also is why other manufacturers may be able to escape from the Ford principle.

• **Lost Wages?**—Ford for the past year or so has had an excellent record of employment stabilization. During its period of changeover to the 1955 model, no plant was down longer than 10 working days. Ford hopes to cut this even shorter. At the end of three years from now, so little may have been withdrawn from the unemployment compensation trust fund that many employees may look back with regret at the 5¢ they could have had in wages if it had not been frozen in a trust fund for three long years.

• **Gripes**—On the skilled trades side, there was almost open rebellion among Ford's skilled workers when the terms of the new contract were announced. These workers had asked for a 30¢ wage increase. They got an average of 8¢—plus, of course, the improvement factor. Many of these workers felt that UAW, in its insistence on something resembling a guaranteed wage, had been forced to trade off a sizable wage increase for skilled workers.

The same thing happened at GM. The skilled workers there got a minimum increase of about 8¢, and Reuther said adjustment of wage inequities would mean higher pay for 90,000 GM workers. Still, the skilled trades people struck in some areas, and at Flint a group of them started a movement to be chartered by UAW as a separate local, or to withdraw and form their own independent union.

• **Pros and Cons**—The bargaining lesson is evident as far as automobile tool and die shops are concerned. Practically all of their workers are skilled. If these men feel as strongly about higher wages as do their fellow craftsmen at Ford and GM, the Ford prin-

ciple may die a quick death at tool and die shop bargaining tables.

Executives of auto suppliers in Detroit this week had not yet made up their minds about the principle. They recognize that if the GAW nickel doesn't go into a trust fund it may have to go directly into a wage increase.

As a generalization, the tool and die shops are in a feast-or-famine business. Yet there are few unemployed tool and die workers. When one shop has to lay off because it lost a contract, the company that won the contract is hiring. Detroit papers every day carry ads for skilled workers. Under these conditions, the workers themselves may be more interested in wages than in unemployment benefits, and the companies in the end will most likely back the Ford principle because it obviously could be ruinous for small shops.

• **Big and Small**—The main thing about the Ford principle that is becoming more and more understood around Detroit is this: For big companies it might be a very cheap way to buy yourself out of a demand for a large wage increase; for small companies whose employment fluctuates with its contracts, a straight wage increase might be cheaper.

III. Length of Contract

One of the thorniest issues in the Ford-UAW bargaining was the length of the contract. The three years agreed upon strikes a balance between the one year sought by UAW and the five years desired by Ford. A three-year contract still can qualify as a long-term contract. But it represents a two-year reduction from the 1950 agreement pioneered by General Motors and UAW.

Contracts of more than one year's duration are relatively new as an important bargaining consideration. Before 1948, contracts lasting three years or more were uncommon. Then in 1950 the five-year auto contract was signed. And by 1952, more than one fourth of existing labor contracts were for three years or more. A 1954 BLS survey of 284 major agreements found this percentage holding up.

• **Theory**—One theory on long-term contracts maintains that they ride the swells of the economic sea. At times when labor has qualms about economic prospects—as it did in 1950 before the Korean conflict erupted—it will seek long-term contracts in an effort to hold onto concessions already won. In the same situation, management will go after shorter agreements to gain more flexibility on the question of labor costs. But when economic prospects are bright, each group will switch to the other side of the fence. Labor will seek short contracts in the hope of chalking



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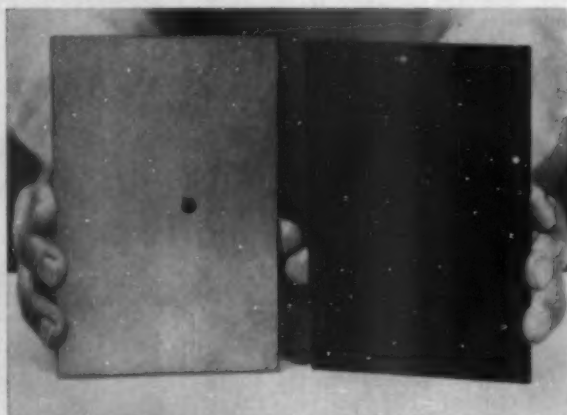
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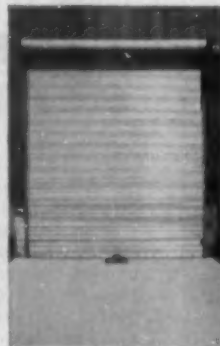
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up new gains, after a year or two, and management will favor longer contracts to protect itself against new demands.

Support for this theory can be found in a Stanford University study (The Long-Term Contract in Labor-Management Relations, by Edward Reighard, Stanford University, Stanford Calif.). The study contains statements from both union and management leaders indicating that the economic outlook influences their positions on contract duration at a given time.

• **Application**—And the theory may explain why UAW originally wanted a contract lasting one or two years, while Ford was shooting for one that would run five years. Secy. of Commerce Sinclair Weeks and many economists believe that our economy will continue on the upgrade. So it would be to the advantage of UAW to seek a shorter contract so it could try for new gains in a year or two, and to the advantage of management to seek a longer contract and keep a lid on labor costs.

Obviously the greatest benefit a long-term contract has to offer is industrial peace. But, as the Stanford study brings out, long-term contracts usually emerge where a mature labor-management relationship exists and industrial peace has become pretty firmly established. The study cites the 1950 UAW-GM agreement, in which 165 of the 200 paragraphs were carried over from the preceding contract, as an example.

• **Drawbacks**—But the study lists some possible drawbacks to the long-term contract. These are general and may not apply to all specific cases:

- **Reopening clauses**, under which negotiations may occur during the life of the agreement, can become a new source of trouble if there is a difference of opinion about which issues are reopenable. Further, negotiations limited to one or two reopenable issues may be difficult because no "package" deals can be made.

- **Management may lose touch** with the labor situation when negotiations are infrequent. On the other hand, many people claim grievances arising under the agreement will keep management very much in touch.

- **Democratic processes** within the union may suffer. Union leadership with a five-year contract under its belt may become indolent and indifferent toward the wishes and grievances of the rank and file.

- **Unrest in the union rank and file**, with possible wildcat strikes resulting, may be created if other unions with shorter contracts are making consistent gains.

- **Conclusions**—The Stanford study comes to several conclusions. It states that small industries, particularly those in which multi-employer bargaining is involved, are turning increasingly to contracts of three years or longer duration. It also notes that neither labor nor management is opposed to long-term contracts in principle, though the two groups may be at odds with each other on the issue in a specific situation. And since the two groups don't always size up the economic situation the same way, it is possible for both to favor long-term contracts at the same time.

Hearing Takes a New Twist

Senate labor unit hears testimony on Neely bill and gets opposing parties to suspend Buffalo Arms strike. But it strikes out in second attempt try at conciliation.

Should government contracts be denied to firms that refuse to comply with National Labor Relations Board orders? CIO has been contending for months that they should be. Failing to establish such a policy through administrative decision, it's now trying to get it done by law.

Two weeks ago, Sen. Matthew Neely (D-W. Va.) placed before a Senate labor subcommittee, of which he is a member, a bill that would bar government contracts to any company found guilty of an unfair labor practice until the violation had been ended or NLRB had been reversed in federal court. The subcommittee held hearings in Washington.

The sessions attracted a flurry of interest, much of it unexpected.

• **The Testimony**—The testimony for

and against the bill itself was pretty routine. CIO criticized federal procurement agencies—particularly the Defense Dept.—for continuing to award contracts to low-bidding companies regardless of "flagrant labor practices." Arthur Goldberg, CIO general counsel, protested that doing so "seriously impairs the implementation of our national labor policy."

The subcommittee was predominantly sympathetic, but CIO got little support otherwise. AFL Secy.-Treas. William Schnitzler did not appear personally but merely sent a letter calling for "early enactment" of the bill. Arthur Larson, acting in behalf of Secy. of Labor James P. Mitchell, then abroad, acknowledged the desirability of tightening the enforcement of NLRB decisions, but scarcely supported the



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methods proposed in the Neely bill. Even NLRB, which is anxious to increase compliance with its orders, had strong reservations about the proposed legislation.

Employers, opposing the bill, criticized it because it would bar government work to any company that wanted to test an NLRB decision in the federal courts. The cost of losing contracts could prove "so intolerable as to prohibit an appeal, no matter how well justified," one employer said.

• **Side Issues**—These arguments had all been advanced before, when CIO was trying to get defense contracts barred to employers who resisted compliance with NLRB orders. They altered the situation in no way, and left the bill with little chance of advancing further. The subcommittee hearings would have been forgotten quickly except for these side developments:

• The Senate group took time out from hearing testimony on the Neely bill to facilitate the settlement of a long, bitter strike. Encouraged by this success, it tried to end another, and set off a lively exchange of words with management and union representatives.

• The subcommittee—Neely, Sen. Pat McNamara (D-Mich.), and Sen. Irving Ives (R-N. Y.)—showed its friendly attitude toward labor by inviting Goldberg to cross-examine government witnesses on the Neely bill. The CIO general counsel took full advantage of the opportunity, even though he seemed surprised and a little embarrassed by the rare recognition granted him. He asked some pointed questions, and got replies likely to prove useful to CIO in its continuing attacks on NLRB and the administration of the Taft-Hartley law.

• **Conciliation**—The strike settled with subcommittee aid was that of the United Steelworkers (CIO) at Buffalo Arms, Inc., a division of Frontier Industries, Inc., in Buffalo, N. Y. In progress since June 15, 1954, it involved a representation question.

The Senate group had no advance plans for intervening in the walkout. It had invited Ralph Peo, a company official, and Joseph Molony, Buffalo regional head of USW, to testify before it on the Neely bill. Buffalo Arms is one of the companies that has received new government contracts during a CIO strike, and has been a particular target of the union's criticism.

When Peo and Molony appeared before the subcommittee, they were on a congenial "Ralph" and "Joe" basis. Ives decided that if they could be persuaded to sit down together, privately, the long strike might be brought to a quick end. He suggested it. Molony was willing, but Peo held out for a conference at some place other than in

a Congressional office. Neely practically led him to his office, where Molony joined him. A half-hour later, Peo and the union leader returned, to announce that the strike would be suspended while the representation issue is reviewed in the courts.

• **Second Try**—The subcommittee efforts to get Buffalo Arms and USW to end their deadlock disturbed many people in industry and labor circles. It opened vistas of new pressure moves in management-labor relations coming out of Congressional hearings on unrelated matters. But if anyone feared that a precedent had been set, the fear was soon dispelled when the subcommittee tried to repeat its earlier success by settling a second strike.

The United Auto Workers (CIO) walked out at the Kohler Co. in Kohler, Wis., on Apr. 5, 1954, when contract bargaining became deadlocked. As in the case of Buffalo Arms, Kohler is resisting NLRB unfair labor practice orders but has continued to get government contracts. The latest is a \$2-million Army shell contract. CIO charges that in continuing to do business with Kohler, the Defense Dept. has "encouraged" the company in its fight against UAW. Emil Mazey, secretary-treasurer of UAW, and Lyman C. Conger, chairman of the management committee of Kohler, appeared before the committee to testify for and against the Neely bill. Neely, a student of the Bible, quoted the Golden Rule from the Sermon on the Mount to the two officials. Ives reminded them that a 30-minute talk between Peo and Molony "in a spirit of good will" had brought the long and costly Buffalo Arms strike to an end.

Ives then asked Mazey about his relations with Conger. "I say hello to him," Mazey replied. Would he consider Conger "a pretty good fellow"? Mazey replied bluntly: "That isn't my opinion of him." Ives wanted to know if Mazey was "on terms [with Conger] where you could call him on the phone?" Yes, Mazey said, adding that Conger never called him on the telephone, although "he has called me a lot of things."

• **Rebuff**—After suggesting that the time for name-calling in the Kohler controversy should have passed long ago, Ives asked Conger if he would be willing to sit down "here with Mr. Mazey in a room in the United States Capitol and negotiate a contract?"

"No, I would not," Conger said flatly. "We've sat down with them many times before. We're willing to sit down with them again, but not here in Washington." He added that the subcommittee should remember that he had come to Washington to testify against the Neely bill, not to bargain with UAW. The subcommittee glumly went back to hearing testimony.

LABOR BRIEFS



New York backing is being given Miami Beach hotel strikers through a union-operated information center in midtown Manhattan (picture) and radio and newspaper ads—all a form of long-distance picketing aimed at keeping tourists out of hotels involved in an organizational strike by the Hotel & Restaurant Employees (AFL). The same tactics are being used in other centers of AFL strength. Florida courts have banned on-the-spot picketing at most of the 18 struck hotels (BW—May 28 '55, p. 169), ruling the union must prove that it represents a majority of the employees of each hotel before it can post pickets.

In Louisiana, a CIO strike against Godchaux Sugars, Inc., and Colonial Sugars entered its third month, with the key issue, according to the union, a demand for a 3¢ reduction in a claimed 41¢ North-South sugar refinery wage differential. The companies have offered a 5¢ hourly raise; the United Packinghouse Workers wants 10¢. UPW reports 1,500 "on the levee," or striking, despite restraining orders.

A lie is excusable during the heat of a union representation election campaign, the National Labor Relations Board said in an unanimous decision last weekend. At the same time, in voiding an election at the Gummed Products Co., in Troy, Ohio, the board held that "false statements" must not exceed the "limits of legitimate propaganda." Included as allowable "propaganda" are "exaggerations, inaccuracies, partial truths, name-calling, and falsehoods" that aren't so "misleading as to prevent the exercise of a free choice" of or against a petitioning union.



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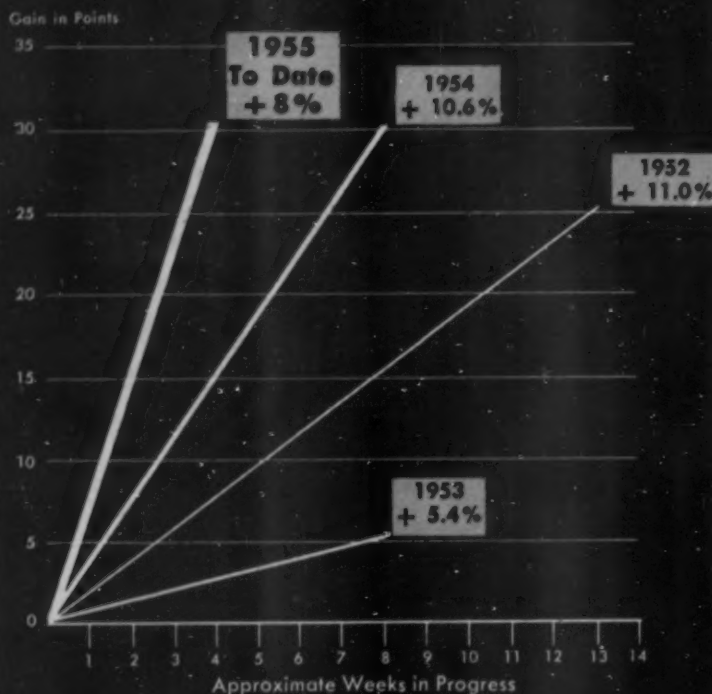
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THE MARKETS

This Year's "Summer Rally" vs. Some Preceding It



The Climb Has Been Steep

Wall Streeters who watch the market from hour to hour, day after day, may be a little surprised by the chart above. The feeling has been pretty general that the showing of the bull market so far this year hasn't exactly been flashy. This feeling was reinforced by the market's backing and filling in the face of the settlement of the guaranteed annual wage issue by the two largest auto companies.

But despite the disappointments—and there have been many so far this year—there are some encouraging signs for disheartened bulls. The summer rally is off to its fastest start in four years. Since the mid-May low, Standard & Poor's index of 50 industrials has gained 8%, or 30.4 points. If the rally should hold at least through July, as most do, this could well be the top hot-weather ascent in many a year.

• **Doubts**—However, even in the face of an early-starting summer rally, many observers are suspicious of the market's strength. They were disconcerted

by the relapses that followed the Ford and General Motors settlements, especially the post-GM setback, which came on heavier volume than was seen on the previous day's rise. With no big strike to unsettle the auto shares and with a guaranteed wage package that carried inflationary implications, brokers and customers' men were sure that a smooth upward course was assured for the market.

But even on the days when the market has shown good gains, it seldom has held at the day's highs, usually selling off late in the session. And big individual gains are coming on scanty volume, reflecting the continuing thin markets, especially in the top-grade issues that carry plenty of weight in the market averages. There has been great selectivity in the rise lately, too, with "inflation favorites," such as the oils, chemicals, and metals generally moving up while foods, building materials, and some auto suppliers showed weakness. That the summer rally



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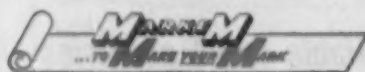


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has seen its share of laggards as well as leaders is reflected in the table below.

• **Profit Taking**—Another disturbing factor in the over-all market pattern is that the recent profit taking has come despite some handsome dividend hikes, as well as the CAW settlements. In the first five months of this year, over 300 companies raised their pay-out rate, compared to only 164 such boosts last year. Yet the raises haven't been enough to sustain yields in the face of the market's halting ascent.

This week, the yield on Moody's average of 125 industrial stocks dropped below 4% for the first time since the immediate post-World War II period.

The Dow theorists are kept on edge by the fact that the rail index hasn't yet established a new high, thus confirming the industrial's high marking the start of a definite upward swing (page 180).

To compound the mental turbulence of many Streeters is their feeling of being trapped no matter which way the market moves. They don't like to see a nosedive, with a broad erasure of paper profits. But if the market advances much more, no matter how hesitantly, the Federal Reserve may well pump up margin requirements again, and rumors are strong that the next rise will make this practically, if not altogether, a cash market.

The Summer Rally: A Sampling of . . .

. . . ITS LEADERS . . .

| | 1955 Range | | May Low | Recent Level | Recent Level vs. | |
|--------------------------------------|------------|---------|---------|--------------|------------------|---------|
| | High | Low | | | 1955 High | May Low |
| Addressograph-Multigraph..... | \$113.30 | \$77.30 | \$83.30 | \$169.00 | - 4.0% | +30.5% |
| Aluminum Co. of America..... | 74.62 | 42.87 | 55.50 | 71.62 | - 4.0 | +29.0 |
| Anaconda Copper..... | 67.50 | 47.00 | 58.37 | 67.37 | - 0.2 | +15.4 |
| Armco Steel..... | 42.25 | 32.62 | 35.37 | 42.25 | ..... | +19.5 |
| Bethlehem Steel..... | 147.87 | 101.50 | 127.25 | 141.25 | - 4.5 | +11.0 |
| Black & Decker..... | 79.50 | 48.50 | 54.75 | 70.50 | ..... | +28.8 |
| Cities Service Co..... | 53.50 | 45.12 | 46.25 | 53.50 | ..... | +15.7 |
| Corning Glass..... | 73.50 | 54.00 | 62.00 | 72.00 | - 2.0 | +16.1 |
| Diamond Alkali..... | 42.50 | 35.25 | 35.62 | 42.90 | ..... | +19.3 |
| Dow Chemical..... | 57.75 | 43.12 | 49.25 | 57.30 | - 0.4 | +16.8 |
| Gimbel Brothers..... | 27.00 | 20.00 | 22.75 | 28.00 | ..... | +23.1 |
| Gulf Oil..... | 80.00 | 61.50 | 67.62 | 80.00 | ..... | +18.3 |
| H. J. Heinz..... | 52.50 | 39.50 | 42.00 | 52.00 | - 1.0 | +23.8 |
| International Paper..... | 114.25 | 82.00 | 96.50 | 114.00 | - 0.2 | +18.1 |
| Kaiser Aluminum & Chemical..... | 40.12 | 18.62 | 24.62 | 37.37 | - 6.9 | +51.8 |
| Minneapolis-Honeywell Regulator..... | 67.00 | 48.25 | 53.00 | 63.87 | - 4.7 | +20.5 |
| Minnesota Mining & Mfg..... | 109.00 | 80.00 | 89.75 | 109.00 | ..... | +21.4 |
| Minnesota & Ontario Paper..... | 69.75 | 51.75 | 58.00 | 68.87 | - 1.3 | +18.7 |
| Rayonier, Inc..... | 90.50 | 57.12 | 73.00 | 90.50 | ..... | +24.0 |
| Remington Rand..... | 57.25 | 31.25 | 39.62 | 55.00 | - 3.9 | +38.8 |
| Republic Steel..... | 46.87 | 37.62 | 40.87 | 46.87 | ..... | +14.7 |
| Reynolds Metals..... | 207.50 | 109.50 | 157.00 | 201.50 | - 2.9 | +28.3 |
| Skelly Oil..... | 56.25 | 48.50 | 48.50 | 56.25 | ..... | +16.0 |
| Tidewater Associated Oil..... | 32.75 | 24.00 | 25.00 | 32.75 | ..... | +31.0 |
| United States Steel..... | 49.75 | 33.75 | 39.87 | 49.75 | ..... | +24.8 |

. . . AND ITS LAGGARDS

| | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| Admiral Corp..... | 30.25 | 24.50 | 24.75 | 24.62 | -18.6 | - 0.5 |
| Alpha Portland Cement..... | 40.00 | 34.87 | 35.00 | 35.75 | -10.6 | + 2.1 |
| American Motors..... | 13.37 | 9.75 | 10.25 | 9.75 | -27.1 | - 4.9 |
| American Stores..... | 58.25 | 47.50 | 49.12 | 47.50 | -18.5 | - 3.3 |
| Blaw-Knox..... | 31.00 | 25.12 | 25.50 | 25.37 | -18.2 | - 0.5 |
| Borden Co..... | 66.37 | 62.12 | 64.50 | 64.25 | - 3.2 | - 0.4 |
| Bullard Co..... | 47.87 | 30.12 | 30.12 | 31.00 | -35.2 | + 2.8 |
| Campbell Soup..... | 44.25 | 38.25 | 40.00 | 40.00 | - 9.6 | ..... |
| Carrier Corp..... | 64.75 | 56.62 | 56.75 | 56.87 | -12.2 | + 0.2 |
| Crane Co..... | 48.75 | 37.12 | 43.00 | 43.00 | -11.8 | ..... |
| Devos & Reynolds "A"..... | 42.25 | 37.00 | 37.50 | 37.50 | -11.2 | ..... |
| Emerson Radio & Phonograph..... | 16.37 | 13.37 | 13.87 | 14.12 | -13.7 | + 1.8 |
| Federal-Mogul Corp..... | 45.00 | 32.12 | 34.00 | 34.37 | -23.6 | + 1.1 |
| General Foods..... | 86.12 | 75.00 | 82.75 | 84.12 | - 2.3 | + 1.7 |
| S. S. Kresge Co..... | 32.00 | 29.25 | 29.62 | 29.25 | - 8.6 | - 1.3 |
| McGraw Electric..... | 58.00 | 47.00 | 49.50 | 48.00 | -17.2 | - 3.0 |
| Pet Milk Co..... | 73.50 | 63.00 | 66.25 | 63.00 | -14.3 | - 4.9 |
| Reynolds Tobacco "B"..... | 46.75 | 40.00 | 44.00 | 42.75 | - 8.6 | - 2.8 |
| Smith-Douglas..... | 33.75 | 25.50 | 25.50 | 26.00 | -23.0 | + 2.0 |
| Studebaker-Packard..... | 15.37 | 10.50 | 11.25 | 10.50 | -31.7 | - 6.7 |
| Virginia-Carolina Chemical..... | 51.75 | 36.37 | 42.75 | 41.25 | -20.3 | - 3.5 |
| Victor Chemical..... | 37.87 | 31.50 | 31.50 | 32.25 | -14.8 | + 2.4 |
| Westinghouse Electric..... | 83.25 | 67.50 | 67.50 | 70.37 | -15.5 | + 4.3 |
| F. W. Woolworth..... | 52.62 | 45.75 | 45.75 | 46.62 | -11.4 | + 1.9 |
| Youngstown Spring & Wire..... | 32.37 | 25.75 | 27.25 | 26.62 | -17.8 | - 2.3 |

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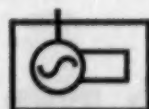
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Wall St. Talks . . .


. . . about The Exchange's line on investment . . . the forgetful experts . . . debit slump called "long overdue."

Wall Streeters who read the New York Stock Exchange's monthly magazine, *The Exchange*, are puzzled by what some of them think is an inconsistency. For many months the magazine has urged readers to "Own your share of American business" either through direct purchase or via the Monthly Investment Plan. In a recent article, however, G. Keith Funston, Big Board president, says maybe everyone shouldn't own his own share, after all. Current income, savings, job security, and "your own particular temperament" should all be considered before investing, says Funston. And, he adds, "When you make your first investment, pay for it in full."

Is Wall Street on the ball? You could well ask this question after last week's market action of Lockheed Aircraft. The stock lost over two points when an earnings report showed a slump in net income. Nobody noticed that the same figures had been made public over a month before at the company's annual meeting.

"Long overdue" was one Streeter's reaction to the May slump in customer's net debit balances. The April margin hike seems finally to be affecting new purchases, although initially it didn't seem to be having much effect at all. From the last previous monthly decline in customer's debit balances in February 1954, until last month, debit balances rose more than \$1-billion. The April-May drop was from \$2.75-billion to \$2.73-billion. At the same time, customer's free credit balances dipped from \$973-million to \$928-million.

Old theories never die; Last week's strong stock market showing was regarded hesitantly by some analysts and market letter writers. The reason: The rail index hadn't yet signaled the start of an upward swing, according to Dow theory, by striking a new bull market high to confirm the high reached by the industrials. A. J. Cortese, of A. M. Kidder & Co., noted, "If . . . the rails fail to confirm the new high in industrials, there will be many who will take profits for this reason alone." And Barron's Dow Analyst, in choice Dowian terms, characterized the market situation as one of "an intermediate downward trend within the primary upward movement."



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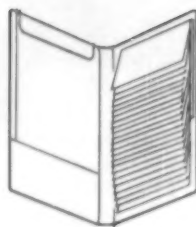
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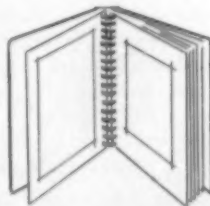
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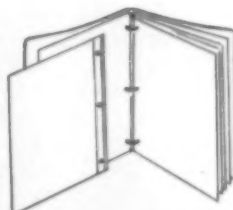
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PERSONAL BUSINESS

BUSINESS WEEK
JUNE 18, 1955



A successful executive can easily get lulled into a false sense of security regarding his job.

Normally, he has no reason to feel that his sense of security is false. He has progressed steadily up the executive ladder. He has 10 or 20 years paid into a retirement fund. His company has a long record of stability and a long list of successfully retired executives.

Yet the cold fact is that anybody can lose his job at any time—regardless of his position. Mergers, proxy fights, routine management changes, personality conflicts—these are just a few of many developments that can put even a top executive on the street. And it happens often.

If it does happen, how do you go about getting another job? Best bet is to go to a management consulting organization that specializes in executive recruiting. More and more top positions are being filled through such groups.

First thing to remember is this: A consultant is not an employment agency—he is not interested in placing you. His client is the company with the executive vacancy; his job is to find the most capable man to fill it.

So don't expect to get a job on your first visit. The primary objectives here are to give a first impression of yourself and to get your record into the search machinery for future use.

According to one consultant, Handy Associates, you should stress only two things in the first interview: (1) your type of industry; and (2) type of position. These are cross-references that later make the search machinery work for you.

Keep the interview crisp, brief, and to the point. Don't ask for advice about changing your life's work; the recruiting consultant is not a personnel counselor. And avoid rattling off your life history, expecting the consultant to make notes on your career. He won't.

Probably your most important tool is the one with which you have had the least practice—the resume. You may feel that, having been an executive for so long, the resume is strictly for people on lower levels.

According to the experts in executive job-hunting, that just isn't true. On the contrary, the resume is as standard in business as the calling card. Yet since good executives need them less than most people, they have the least knowledge as to how to prepare one. Here are the main points to keep in mind:

List first what you have accomplished most recently—because the top half of the page is the critical area. An executive scanning your resume crystallizes his feelings by the time he has read that far. If he decides in your favor, he'll read on or request an interview.

Thus it's wise to avoid your natural tendency to tell a chronological narrative. Stick to the facts, and put the important ones first. The reasoning here is that the greater your ability, the fewer words you will need to tell your story. Thus the most effective part of a resume might be its first line: "1940-1955, President, XYZ Co.; during that period sales volume rose from \$100-million to \$150-million."

There are two cardinal principles you should observe. One is to state your salary level at each stage in your career. In the executive market place,

PERSONAL BUSINESS (Continued)

BUSINESS WEEK
JUNE 10, 1955

this is your index of value. Leave out what you should have been paid or what you thought you were worth; these are meaningless.

The second principle is this: Don't hide your age. When it's missing from a resume, the assumption is that you are too old.

For most executive jobs, incidentally, your chances are best if you are 45 or under. That's because any employer will be interested in you only if he sees a way to make money out of your career. The number of years you can work before retirement is an important factor to him.

Finally, remember this: Even though it may be the best source, don't rely solely on a recruiting specialist. Try every possible avenue to find an executive vacancy—friends, associates, direct mail campaigns, and the like. No two men ever find their niche the same way. There is no set formula. And there is no easy way.

—•—

Neophyte campers are likely to have a fear of using gasoline cooking stoves and lanterns. Of course, gasoline can explode (and so can bottled gas) if it isn't handled with respect.

Yet experienced outdoorsmen use such equipment—particularly the Coleman-type gasoline stove—as a routine matter. Only a few common-sense precautions, they say, are necessary to assure safety.

The most important thing is to follow carefully the instructions with the appliances. They have built-in safety features. For example: The flame automatically goes out if a lamp or stove is knocked over. And construction is such that raw gasoline can't escape through the generator tube in the process of ignition.

—•—

In its inert state, gasoline is as harmless as water. But it vaporizes easily—and that's when it becomes dangerous. (The same thing is true of bottled gas.)

Never carry gasoline in a glass container. If exposed to high heat, it can expand enough to break the glass, escape—and explode. There's little danger of this if you use a metal container that closes tightly.

If you use bottled gas, watch out for leaks. Don't store containers of it in a room with an open flame.

—•—

Look for either Perthane or Strobane as one of the components of your next spray-bomb moth preventive. These two new chemicals are said to be safest and most effective in keeping stored woolens moth-free.

—•—

Certified mail, a new post-office service, assures delivery of important papers, receipts, and mail of no monetary value. As in registered mail, you get back a signed receipt, if you request it. One big advantage: Certified mail can be dropped in any mail box as long as you stick a special tag on the envelope. You can get a supply of tags at your post office.

—•—

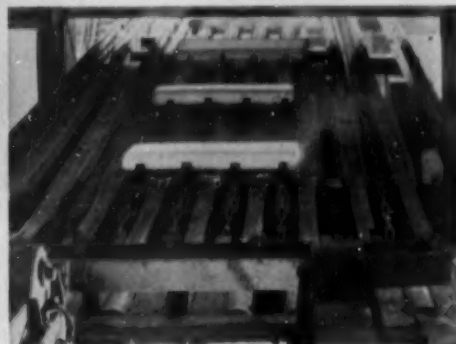
Manners and modes: A private jet plane for executives and companies will be on the market soon. It carries four passengers, cruises at 410 mph., costs about \$300,000. . . . Americans drank 25% more French champagne in the first three months of this year than in the same 1954 period. . . . Swimming pools are getting almost as common as two-car families. An estimated \$160-million will go into new pools for Americans this year.



Downtilter at Link-Belt-equipped steel mill automatically transfers coils from pallet conveyor to unique transfer car having retractable carrying rollers. Then coils are gently lowered to a V-top banding conveyor.



Ore, sinter, pellets or limestone are carried to storage area and are individually stacked by this 1900-ft. Link-Belt distributing belt conveyor equipped with traveling tripper-stacker having a 40-ft. boom.



Dependable Link-Belt chain conveyor with pusher attachments transfers white hot steel billets up incline to further processing.

Yield goes up, waste down

in steel mills where Link-Belt conveyors and drives
boost capacity, conserve manpower, improve safety

THE growth of the nation's steel output in the last few decades is far in excess of the expansion in mill facilities. To a large extent, this has been achieved by increased handling capacities in every phase of steel production. And in almost any mill you visit, you'll see Link-Belt conveyors and drives at work . . . providing top efficiencies from raw materials to finished products with minimum space and cost requirements. Safety is improved too—confusing cross traffic eliminated, and workers can be kept clear of hazardous locations.

In typical modern mills, slabs, billets, plates and tubes travel on chain conveyors. You'll find skelp moving to reels on Link-Belt apron conveyors . . . scrap on car-type conveyors . . . rod coils carried by overhead

conveyors. Other Link-Belt equipment handles coils of sheet steel—turns, weighs, raises or lowers them gently . . . down-tilts or up-ends them as though they were spools of thread.

Link-Belt engineers will work with your own engineers, consultants and builders of mill and process equipment. Together, they can give you a system built to your exact requirements. In fact, it will pay you to contact your nearest Link-Belt office for any industrial conveying need. Or write LINK-BELT COMPANY, Dept. AV, 307 N. Michigan Ave., Chicago 1, Ill. 12,097

LINK-BELT

One source . . . one
responsibility





7.5 million families are in debt to hospitals, physicians, dentists and other providers of medical goods and services. Their total debt is \$900 million—if money borrowed to pay medical bills is included, the total jumps to \$1.1 billion!

Definitely, medical debt is a serious problem. Business and industry, as sponsors of insurance programs, must provide a solution.

Saving is not a complete answer. Neither is insurance, especially when it violates basic insurance principles as do most group insurance programs. It takes both—savings and real insurance, in proper balance—to insure needed health care.

Zurich-American's Group Programs consider both. They promise the employer an effective, cost-stabilized plan, based on sound insurance principles, to assure the financial independence of his employees.

Find out about Zurich-American's answer to medical debt. Ask your insurance counsel for Zurich's pamphlet "Medical Debt—What You Can Do About It." Or write,

Zurich-American

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For further information write Cushman & Denison Mfg. Co., Dept. B-W, 103 West 33rd St., New York 11, N. Y.

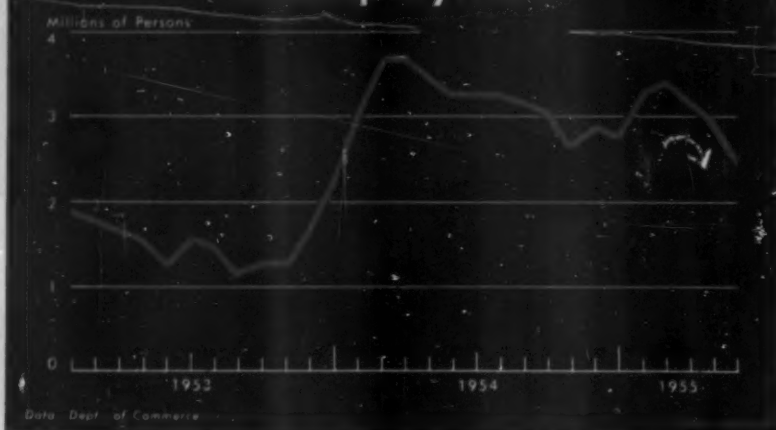
help wanted

- every business man needs help—and needs it badly—at some time or other. If you have a business service that will help America's business executives—the readers of **BUSINESS WEEK**—then tell them through the Business Services Section of "Close."

Just write Classified Division
BUSINESS WEEK, 330 W 42nd St, NY 36

CHARTS OF THE WEEK

Unemployment



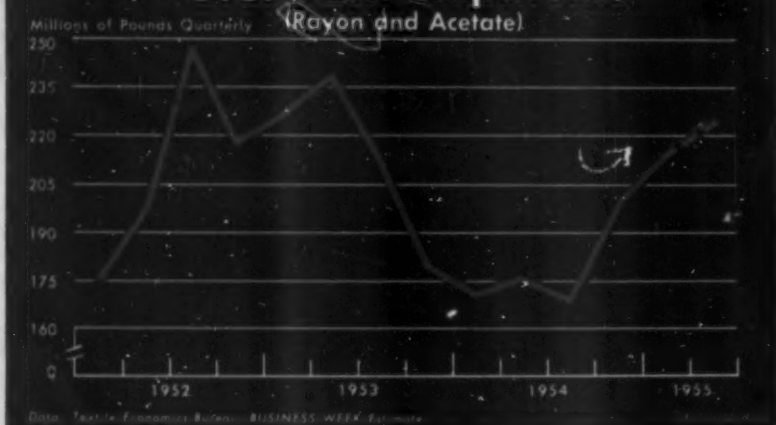
Decline Gains Momentum

The figures on the labor force this month strike a more cheerful note than they have for some time. Unemployment is dropping fast from the troublesome levels of 1954 and early 1955.

Unemployment in May dipped sharply. It declined 473,000 from April, to 2,489,000 persons—the lowest point

since December, 1953. At the same time, the employed increased their numbers by 1,018,000—more than twice the amount of the decline in unemployment. The labor force increased to 65,192,000. Unemployment now stands roughly 25% below the level of May, 1954.

U.S. Yarn Shipments



Rayon Makes a Comeback

Less than a year ago, it looked as though the oldest of the man-made fibers might be starting along the road to oblivion. But rayon and acetate yarn shipments have staged a comeback.

Latest quarterly figures show a sharp upswing for rayon and acetate yarn

shipments from the 1954 low. In first-quarter 1955, domestic shipments amounted to 218-million lb., 23% more than a year ago and less than 5% under first-quarter 1953. It looks as though second-quarter shipments will even exceed the first quarter.

BETTY FURNESS SAYS:

"No elevator operator... but Suzie's as safe as in her bed!"



Only New Westinghouse Traffic Sentinel "Babies" **All Your Elevator Passengers These 2 Ways:**

- 1. Prevents Threatening Door Movements While Passengers are Entering or Leaving the Elevator.**
- 2. Eliminates All Unnecessary Door-Open Time in Heavy-Traffic Buildings.**

Now, operatorless elevator passengers in heavy-traffic buildings are free at last from any fear of doors closing on them as they step in or out of cars. Gone forever is this last objection to the tenant acceptance of the operatorless elevator in large office

buildings. TRAFFIC SENTINEL is the reason for this new confidence—TRAFFIC SENTINEL, the Westinghouse electronic door control that is more efficient, more responsive than a human attendant.

Invisible Beams Control Doors

Invisible infra-red beams "watch" passenger movement and synchronize door closings automatically according to traffic flow, operating with 1 person or 20.

Cuts Door-Open Time

Combined with this new "freedom from door annoyance" is TRAFFIC SENTINEL's time-saving advantage—eliminating ALL unnecessary door-open time throughout the building.

Learn more about this latest Westinghouse contribution to more efficient operatorless service. Call our nearest office today for full details.

Westinghouse Elevators

YOU CAN BE SURE...IF IT'S Westinghouse

A-95710A

**MAKE 2 HANDS
DO THE WORK OF 3**
with

MAGNA-TIP® ACCESSORIES



In assembly operations, power screwdrivers equipped with Magna (magnetic) screw and nut holding accessories will give your workers a third hand! High energy permanent magnet holds screw. One hand controls both screw and screwdriver. Leaves other hand free to hold job.

Check with your production men about these ingenious cost cutters. Ask your power screwdriver salesman to show you these handy Magna-Tip accessories.

New Manual ready; write Dept. 35F. Complete information on Magna-Tip Bit Holders, Feeders, Sockets, and Hand Screwdrivers. Magna Driver Corp., 779 Washington St., Buffalo 3, New York.



FOR SALE!

Over 2000 Businesses, Farms and Income Properties throughout the United States and Alaska. Many at sacrifice prices. **FREE, 280-PAGE BOOK**, just off the press tells who the owners are, where they are, what they want to sell or trade, prices, terms, earnings, etc. Contains thousands of opportunities from \$5000 to \$5,000,000! No commission to pay on. No salesman will call. **ABSOLUTELY FREE**. Write what you want and where and we'll advise owners of your requirements.

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Nation's largest agency offers confidential, "Coast to Coast" service. Write giving age, education and experience. Free pamphlet. Employers send complete job description.
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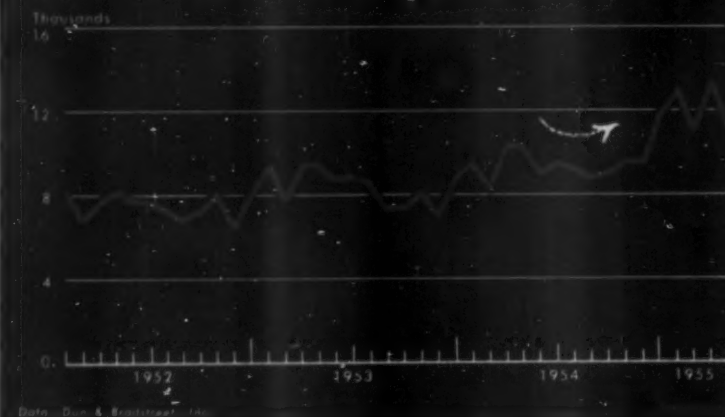
clues to a \$3,000.00 sale

With only a \$20 investment in a small space advertisement in the "clues" section of **BUSINESS WEEK**, a firm secured a \$3,000.00 sale. And better yet, they received substantial inquiries for future orders up to \$10,000.00 each.

By uses, figures show total textile shipments up 47% in the year-to-year comparison for the first quarter. Shipments for tires and related uses climbed 18% from one year ago. These ship-

ments were up to 118-million lb. in second-quarter 1953. They slumped to 70-million lb. in third-quarter 1954, climbed back up to 98-million lb. in this year's first quarter.

New Incorporations



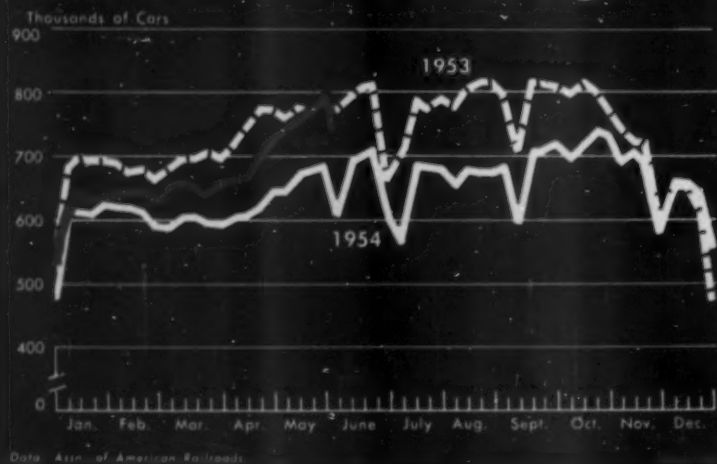
Confidence: Up

The figures on new incorporations show increased confidence in the business outlook. Since last December, they have been climbing sharply. The monthly average thus far in 1955 exceeds even that of 1946. That year was marked by

an upsurge in incorporations; it set a record.

In April, 11,756 new businesses were formed—bringing the total for the year to date up to 49,723. This compares with 38,862 one year ago.

Railroad Carloadings



Freight Business Is Better

For the first time this year, in the last half of May, railroad carloadings were over the comparable 1953 period. The number of cars loaded this year has been running well ahead of 1954 levels.

Record production levels in many industries throughout May have brought about the rise. As a result of this stepped-up business, rail revenues and profits should be well ahead of last year.



Heavier payloads ride on high-strength Jalten

In truck transportation, profits depend on payloads. Payload weights, however, are limited by gross weight regulations. To get maximum payload within those limits, it's often necessary to eliminate *dead weight* in truck and trailer bodies.

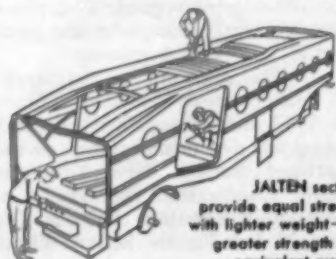
The profit-minded trucking industry is now eliminating dead weight by

the use of a *lighter, high-strength J&L steel called JALTEN*. It permits up to 30% reduction of dead weight in frames, floor channels, cross members, body sheets and rub rails.

In an auto-transport trailer, for example, nearly a ton of dead weight can be eliminated by the use of JALTEN in place of mild steel.

What's more, JALTEN offers greater resistance to corrosion and fatigue, and is easily formed and welded.

High-strength, low-alloy JALTEN steel has many other profitable applications. If your application calls for steel of high strength, with *lighter* than conventional weight, call on J&L for JALTEN.



JALTEN sections provide equal strength with lighter weight—or greater strength with equivalent weight.



Jones & Laughlin

STEEL CORPORATION — Pittsburgh

Hot and Cold Rolled Sheet and Strip • Tin Plate • Tubular Products • Plates, Structural, Hot Rolled Bars • Hot Extruded and Cold Drawn Bars • Wire and Wire Products • Electricweld Tubing • Wire Rope • Steel Containers • Coal Chemicals

Look to J&L... for the steels that work for modern industry



This is Keuffel & Esser Co.—big, silent, faintly Victorian maker of slide rules (right) and other delicate engineering equipment. Its ruling family is above. On the wall, patriarch Keuffel (right) and partner Esser. Second generation: Chairman Keller (standing); vice-presidents Schermerhorn, Keuffel, Wood. Third generation (foreground): Robert Keller, Alfred Busch. Absent: Pres. C. W. Keuffel. This is the family of old-line engineers that for almost a century has run . . .

Keuffel & Esser: Young Ideas

Keuffel & Esser Co., a big company that makes slide rules and transits and several thousand other items of engineering equipment, has lived for 75 years in the grimy industrial town of Hoboken, N. J. Its life there has been a strange and secret one. Amid Hoboken's inelegant soot and noise, K&E has maintained a reserved, aristocratic sort of dignity. Like an old and wealthy family, it has lived aloof in its town house while the city roared and scrambled around it. Its shutters have been closed. It has kept its private life strictly to itself.

Hoboken's citizens—and, indeed, engineers throughout the U. S.—have often wondered what went on inside K&E's walls. But the company is owned entirely by a single family, and it has not been required to tell them. It is one of the two or three biggest U. S. makers of engineering equipment; and in a

nation so closely geared to technology, the K&E trademark could hardly help being widely known. Yet the corporate self behind the trademark has stayed entirely hidden.

• **Ancestors**—Standing inside K&E's board room (picture, above left), you get the same impression of great wealth and aristocratic tradition. Outside, Hoboken shouts and sweats in the hot sun. Inside, it is cool and ponderously quiet. Huge, melancholy pictures of ancestors hang on the walls. A bust of the patriarch, the original Wilhelm Keuffel, watches from a dark corner.

The men in the picture, officers of the company and mostly members of the family, have lived with the reserved K&E tradition for varying numbers of years and with varying degrees of discomfort. The discomfort of late has been most marked, strangely, in one of the oldest officers—75-year-old Karl

Keller, board chairman and treasurer. Under his influence, and with the wholehearted approval of the youngest generation, K&E is beginning to change.

"We have been living in the Victorian age," one of the older executives remarked a few weeks ago. He grinned, but he was not talking entirely in jest. The remark indicated the direction of the change.

It has taken two forms—one physical, the other psychological. The physical one is virtually complete; the psychological one just beginning:

• The company has decentralized its manufacturing operations. Starting in 1947 and ending this year, it has set up five new manufacturing divisions scattered through New York, New Jersey, Connecticut, and Maine; plus a modern distribution center at Teterboro, N. J. It has also become affiliated with two smaller companies in its field.



OLD-TIME CRAFTSMEN still play a big part in K&E's old, multi-story factory.



SPIDERS live in a corner of the plant, spin web for telescope cross-lines.

Amid Old Traditions

Before 1947, K&E's only manufacturing plant was the one in Hoboken—two old, multi-story buildings that presented all sorts of problems in materials flow.

- The company is becoming public-relations-minded. It is abandoning its Victorian reserve for a new and mellow talkativeness. As an example, the general business public has never been told the details of K&E's decentralization program until now, years after it started.

I. Engineers' Engineers

Keuffel (pronounced Coy-ful) & Esser has not mixed much with the general public, but it has gained the fond affection of multitudes of U.S.-bred engineers. They first meet it in high school, when simple and friendly K&E instruments accompany them. In

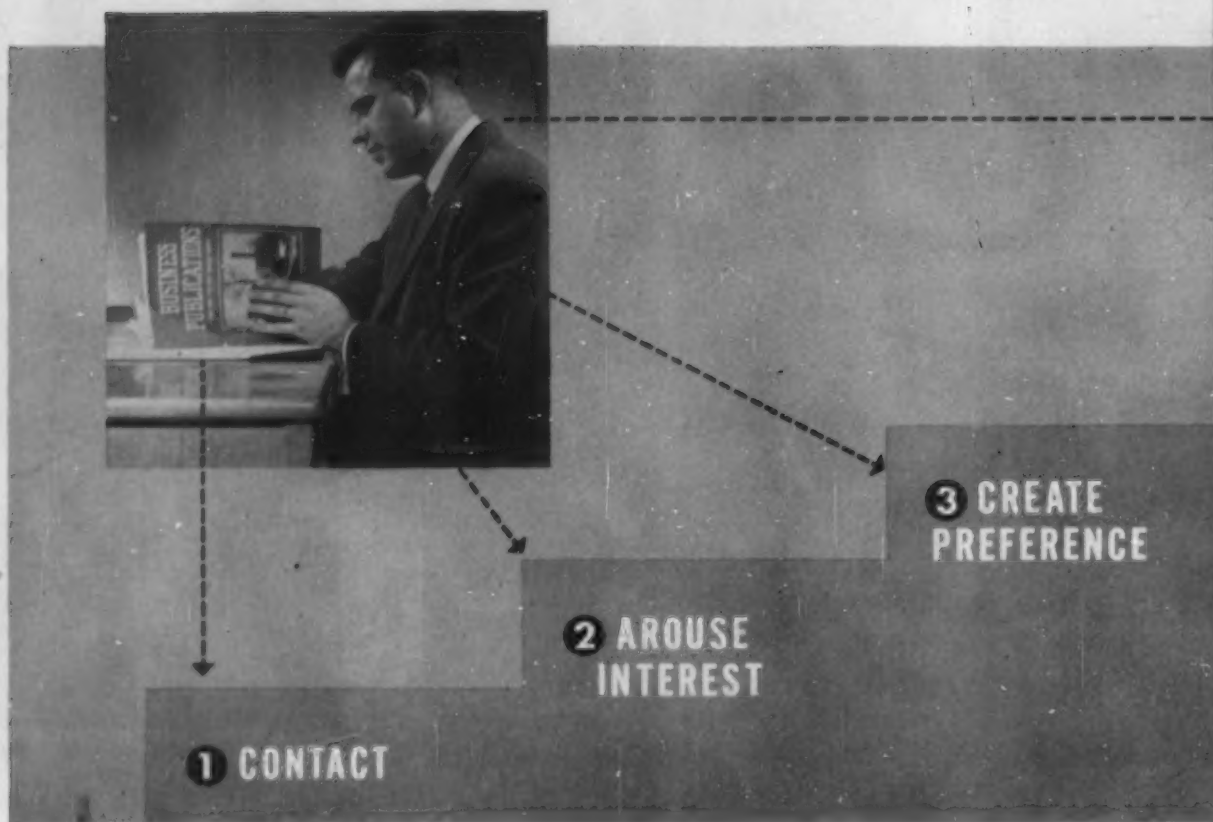
college, the instruments get less simple and less friendly, but K&E stands by with words of comfort. "So You're Going to Be an Engineer?" it asks them in a booklet of cartoons and fatherly advice. "Here's How to Choose a Slide Rule," it tells them, and begs them not to be frightened by such things as the Polyphase Duplex Decitrig and the Log Log Duplex Vector.

Out in industry, engineers find K&E still standing by. It sells them almost everything they might need, out of a steadily growing catalog that now has 475 pages and lists 7,000 items. And it continues to hand out guidance. Many an engineer carries in his pocket, for instance, a dog-eared copy of *Solar Ephemeris*. This is a 140-page booklet published yearly by K&E. Some of its pages advise the engineer to buy K&E equipment; most of it is a sort of reference manual on such subjects as



PRODUCTS include transits, such as this; T-squares, blueprint paper.

SIX SALES STEPS...



Product orders—when you sell to business and industry—are the end result of persistent, informative sales contacts with all of the men who have a voice in the buying decisions.

Some of these contacts—or steps to a sale—can be accomplished *faster* and *more economically* with Business Publication Advertising. Others—particularly the pay-off steps—require the specialized skill and ability of the salesman. It's the combination of printed calls and personal calls that makes for effective selling.

When you apply Business Publication Advertising consistently to the job of telling *all* of the buying influences what your product can do for them, you are saving time for your salesman. You are relieving him—at pennies per call—of many of the preliminary steps that have to be covered along the way to a firm order. You are increasing his productivity by permitting him to concentrate more of his valuable working hours discussing specific product applications and closing sales. And you're helping him keep the door open for future sales.

For Men and Magazines

- 6 PROTECTING MARKETS
- 5 CLOSE THE ORDER
- 4 SPECIFIC PROPOSAL



"ORDERS AND HOW THEY GROW", a 20-page McGraw-Hill booklet, takes a realistic look at just what advertising does—and can do—for the men who sell. Your McGraw-Hill man will be glad to provide you with a copy.



McGraw-Hill
PUBLISHING COMPANY, INCORPORATED

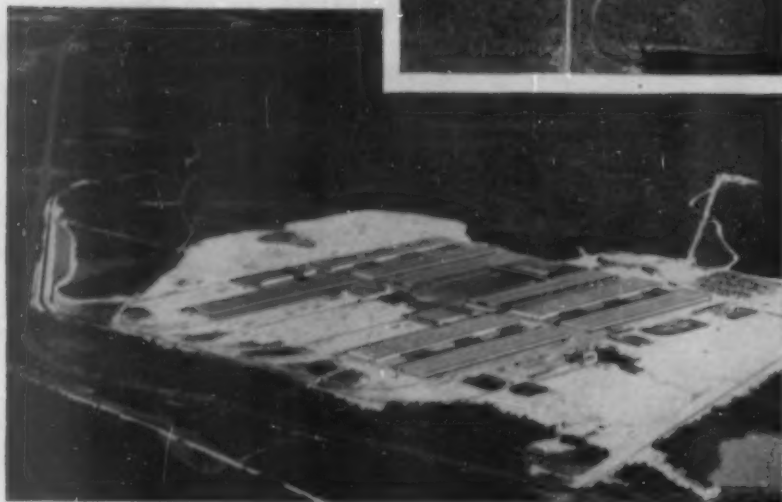


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The Amazing Story of TOBYHANNA, PA.

Midway between Scranton and Stroudsburg, on the Lackawanna main line, is Tobyhanna. Good roads, an abundance of water, quick access to major markets and a strategic location would seem to make it a highly desirable industrial location. But, industry hesitated to "pioneer" the area.

Less than four years ago the Army stepped in. What was nothing but wilderness is now the Tobyhanna Signal Depot—the largest storage-maintenance installation in the Signal Corps system. It extends over 1418 acres, approximately 400 acres already developed.

Now that the way has been opened, we believe that what made Tobyhanna the perfect location for the Army, also makes it perfect for you. Hundreds of choice acres are available. For complete information, in confidence, write or phone:

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Lackawanna Railroad

SHORTEST RAIL ROUTE BETWEEN NEW YORK, BUFFALO AND THE WEST

spherical trigonometry, alidades, and celestial navigation.

• **Beginnings**—Keuffel & Esser is a big company. It has about 2,000 employees. It won't give out sales figures, but it is classed both by itself and by onlookers as one of the biggest such companies in the world. It has retail branches in eight U.S. cities and a sales company in Canada. Like many companies closely allied with technology, it has expanded rapidly in the past 10 years and is still growing.

To get some idea of the size of its business, consider its production of engineer's tape—the steel and woven measuring tape familiar to homeowners. Keuffel & Esser makes some 5,000 miles of this tape each year. In other words, it makes enough every five years to stretch around the Equator.

This all started with Wilhelm Keuffel, a young German who came to the U.S. in the mid-1800s. Once here, he saw a big and growing market for draftsmen's supplies, which at that time were mostly imported from Europe and sold alongside other kinds of goods—often in hardware stores. Keuffel figured he could make money by concentrating on drafting equipment as an exclusive line. He called on Hermann Esser, an old friend he had left behind in Germany. Esser came to the U.S., and in 1867 the two men set up as partners in New York.

At first, they were importers and retailers. But in 1870, they started manufacturing. The business grew. Keuffel & Esser moved its manufacturing operations to a loft building in Hoboken, and in 1880 moved again to a three-story factory—the nucleus of the present plant.

• **Genealogy**—This was the beginning of K&E. It was incorporated under New Jersey law in 1889. Eventually Esser dropped out of the company; the present owners are all related in some way or another to the original Wilhelm Keuffel.

The picture on page 190 shows a major portion of the family. Karl Keller, board chairman (to retire this year), married one of Wilhelm Keuffel's three daughters. Robert Keller, the board chairman's son, is a vice-president. Alfred E. Busch, also a vice-president, is the son of a man who married another of Keuffel's daughters. Busch and Robert Keller, respectively 40 and 37, are now K&E's most influential young executives.

The men who bear the name Keuffel are, oddly, less directly related to the original Keuffel. They are linked through a man named W. L. E. Keuffel, a relative from Texas whom Wilhelm brought into the company during its early days. W. L. E. Keuffel's son, C. W., is president. (The Keuffels are almost invariably referred to by their



At institutions which serve the public

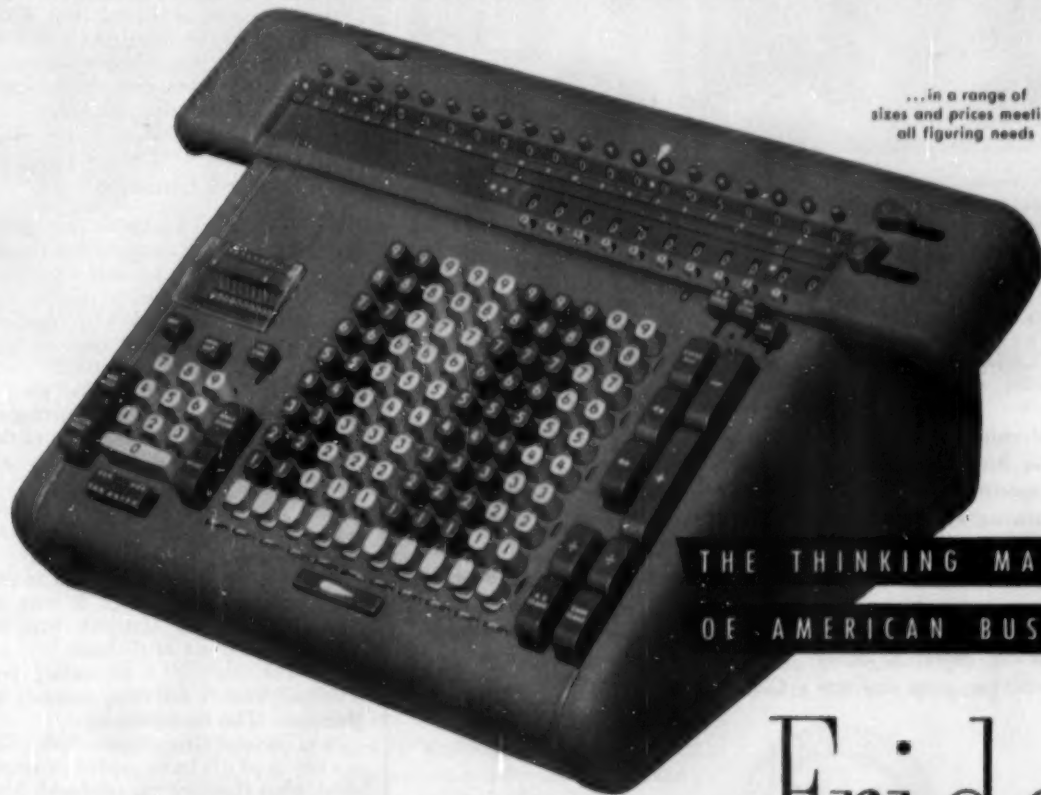
If you manage a hospital or club...operate a hotel or motel

...or if you are in the restaurant business

—the Friden can give you complete cost control

More businesses of every kind, every day, mechanize their figuring with the fully automatic Friden Calculator—for this reason: The Friden performs more steps in figure-work *without operator decisions* than any other calculating machine ever developed. Operator decisions (thinking plus motions) take time

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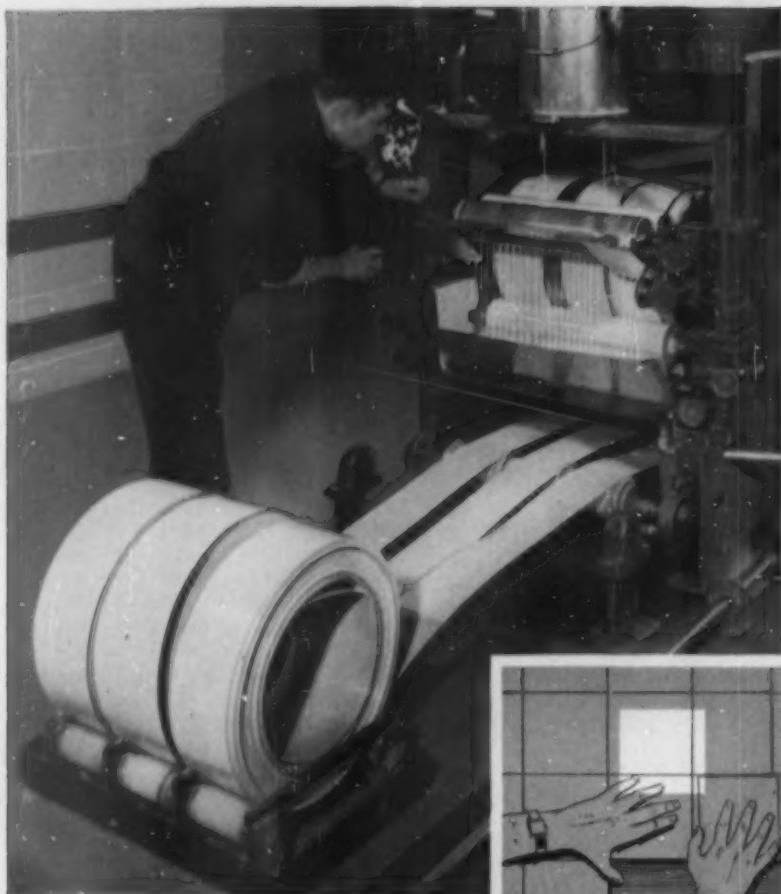
...in a range of
sizes and prices meeting
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EASY TO SEE THE COST SAVINGS a Friden can bring your business. Ask your nearby Friden Man to show you some examples with your own figure-work. Friden sales, instruction and service available throughout the U.S. and the world. FRIDEN CALCULATING MACHINE CO., INC., San Leandro, Calif. ©Friden Calculating Machine Co., Inc.

Products of Friden • THE AUTOMATIC CALCULATOR • THE NATURAL WAY ADDING MACHINE • THE COMPUTYPER • THE ADD-PUNCH MACHINE



GLAMOR FINISH FOR ALUMINUM TILE

Lustrous HASTINGS aluminum wall tile is prefinished, in strip form at 12 feet a minute, with Sherwin-Williams baked enamel, then stamped and formed.

Serving industry everywhere!

Prefinishing aluminum to be formed and bent *after* finishing, or meeting exacting specifications for protecting aluminum aircraft parts—both are part of the day's work for Sherwin-Williams finishes in industry.

Whether your products involve finishing of wood, metal or other materials... whether your maintenance

finishing involves one location or a thousand... one manufacturer—Sherwin-Williams—can offer complete help as broad as your needs. Investigate, today, what it can save you in loss of time... duplication of effort. Check your Classified Telephone Directory or write The Sherwin-Williams Co., Cleveland, Ohio, or Montreal.



SHERWIN-WILLIAMS

Paints for every industrial need

initials.) Another son, A. W., is vice-president. Two other vice-presidents in the picture—H. F. Schermerhorn and Sam Wood, Jr.—are not related to the family.

• **Mood**—The relationship among these men is easy-going, but with just a trace of formality. The younger men are free to argue with their elders and to develop their own ideas. They do, but with large respect.

Almost all of these men are engineers. Many of them are graduates of Hoboken's Stevens Institute of Technology, to which K&E grants scholarships for bright fledgling engineers. The young men of the company are required to learn their business from the ground up, working around production lines and in the research laboratories. Each of them has his own area of responsibility, but each also knows the others' areas. Almost any Keuffel, Keller, or Busch can take you through any plant building and tell you exactly what is being made, how, and why.

It would be reasonable to expect that a business run by members of a single family might have uncomfortable disciplinary problems. The whole relationship of family members is different from that of business associates. But K&E has no trouble. A faint touch of Victorian doctrine, plus a large measure of the typical engineer's unemotional logic, help keep the executive machinery running smooth and quiet.

II. Years of Change

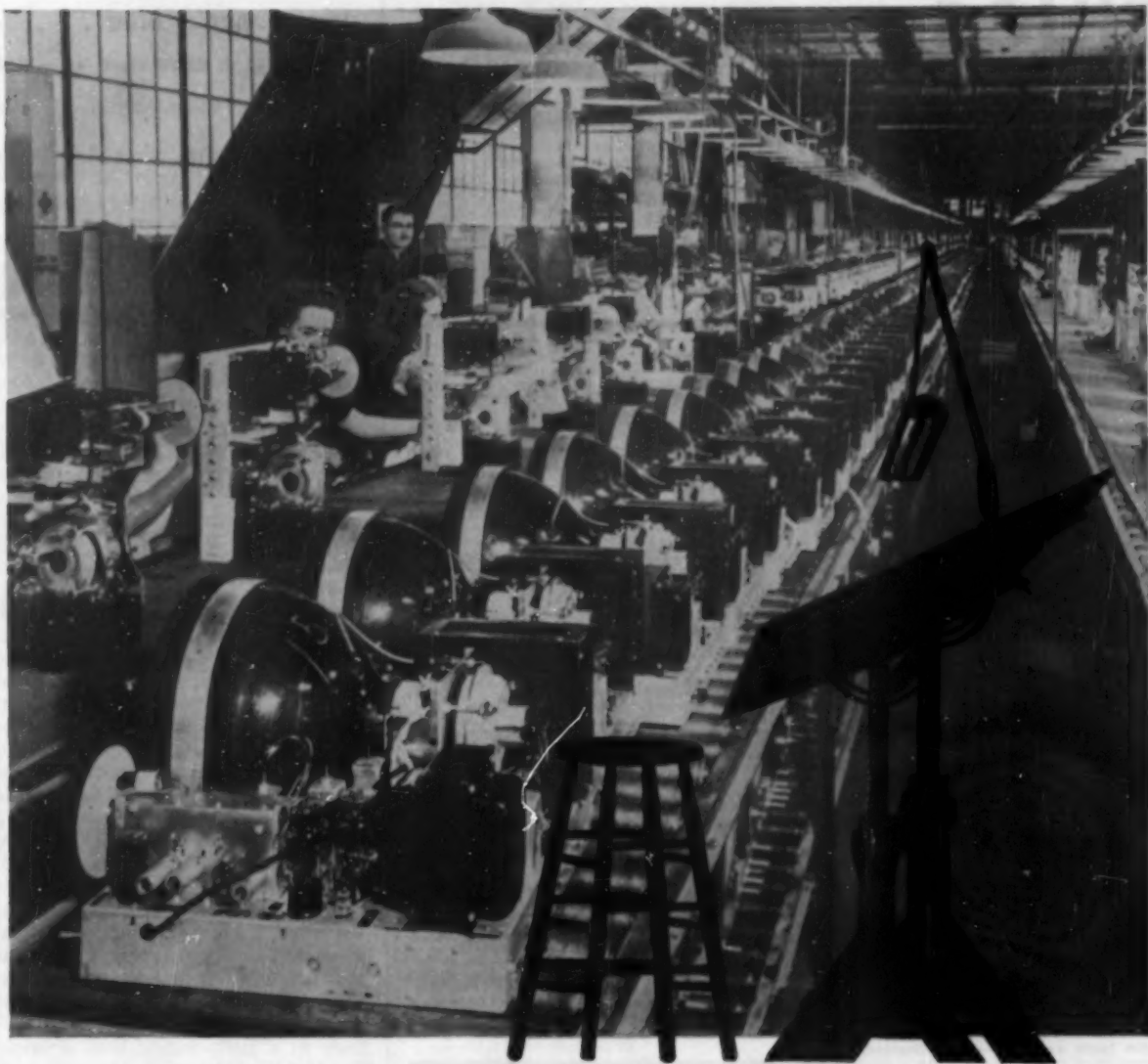
Keuffel & Esser's huge six-story plant in Hoboken is the result of many years of slow change. Old German craftsmen (pictures, page 191) work on fine instruments next to big, shiny, modern machines. The clerical offices on the second floor have a distinctly old-fashioned flavor: The desks are of wood, and the sections are partitioned by waist-high wooden fences. But in the midst of this you see brand-new accounting machines.

This plant has now ceased to be the sum of Keuffel & Esser. The company has spread out. The main reasons:

- The Hoboken plant, two multi-story buildings, is too hard to work in on so big a scale. Materials have to move up and down in elevators.

- The company is expanding, but it doesn't want to buy more property in Hoboken. The tax rate is high.

- The executives found that, with so many products being made in a single plant, their thinking was confused. The products were widely divergent. Slide rules, for instance, require entirely different materials and processes than optical instruments such as transits. The thought was that it would be better to separate these products, put each un-



STUBBORN

STUBBORN

STUBBORN . . . How long would your production lines run if you froze your designs today? Two years? Three years? No matter how good your products, you must constantly improve them. Such is the stubborn law of competition. For this, America will need many more young professional engineers and scientists—for many years to come. For this, more young people in high school must be encouraged to prepare themselves for entrance into our engineering colleges. A good beginning has been made by many companies and by the Advertising Council's "Engineers Wanted" Campaign. Your company, too, can help promote engineering as a career. To learn more about the Advertising Council and its "Engineers Wanted" Campaign, write for the booklets "The Advertising Council, What it is—What it does" and "How your company can help promote engineering as a career." . . .



. . . Advertising Council
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Closing date—12 days prior issue date, subject to space available.

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Position Vacant

A Long-Established management consulting firm is currently seeking several outstanding men to add to its staff because of continued growth in all functional areas. College graduates between the ages of 28 and 35 with at least 5 years experience in one of the following functional areas are needed: Accounting (Cost, budgetary, general), Manufacturing (Production control, facility layout, process methods), Marketing (Sales analysis, organization, research), Personnel (Management appraisal, wage and salary administration). Successful applicants must be analytical, capable of working with top management, and technically proficient in their area of activity. If you qualify, submit a complete resume, including education, experience, and personal background. P-6468, Business Week.

Selling Opportunity Offered

Business Forms Salesman wanted for all territories east of Rockies, for system tags, salesbook, one-time carbon forms, write to President, International Tag & Salesbook Co., 3450 W. Division St., Chicago 51, Illinois, for interview. All replies treated confidentially.

Positions Wanted

Young executive with broad problem solving and organizing experience seeks career position with advancement opportunities. Now marketing division manager of leading mfr. FW-6595, Business Week.

Mechanical Engineer, B.S.E., 39, single, seeks responsible position as assistant to busy engineering executive; soundest technical background; versatile business experience; wide grasp of new sales-engineering concept; has plenty of drive; gets along well with people; gets things done. Documented record available. Box 13, Suite 926, 342 Madison Ave., NYC 17.

Salesman—College degree seeks reputable connection—New York area—ten years experience FW-6755, Business Week.

Native South American—U. S. educated, B.S. in economics—one year training in management, accounting & sales—seeks challenging position in Latin America. Age 28. Free to travel. Available immediately. FW-6795, Business Week.

Executive Male Secretary: forty-four. Broad experience. Healthy, reliable, efficient. Will relocate, travel. FW-6728, Business Week.

Engineer: Aol and 18 degree, MBA nearly completed. 39, single, 17 years diversified experience in aviation, rocket development and rectifier manufacture. Desires position in smaller company providing opportunity of exercising broader management functions. FW-6734, Business Week.

Engineer—Salesman—Pilot. Over 18 yrs broad coverage commercial & military aviation. Need family relocate dry area. Ideal for active business needing economical area coverage in sales, service, field engineering. Resume on request. Foreign considered. FW-6793, Business Week.

Selling Opportunities Wanted

Mfg's Agent—Estab. 10 yrs. 3 salesmen covering hdy, jobbers, industrial, auto-motive and allied type accounts in Southeastern States, desires one more line. Fine record of production. RA-6755, Business Week.

Mfg. Agent, ME fasteners, Southwest desires additional lines. RA-6767, Business Week.

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General scientific information and guidance. Write Consultant, Box 747, Evanston, Ill.

Registered Patent Attorney

Patent Information Book, without obligation. G. Miller, 655W2, Warner Bldg., Wash. 4, D. C.

INDUSTRIAL SITE

Electronics: A New England Community will construct a modern electronics building in a fine industrial park with funds from its charitable corporation, and will arrange for training of labor and recruitment of engineers. Radiation Laboratory of M.I.T. and other research centers only a short distance away. Five year write-off on U. S. taxes. Highly trained staff can offer expert views on plant location in confidence. Industrial executives only should inquire. 18-6565, Business Week.

Business Opportunities

A Western Investment Co. has opportunity to place your money on residential or business property first mortgage at 6 to 8% interest. Write—Diamond Investment Co. Home office 4105 Riverdale Road Ogden, Utah. Branch offices: 3913 Harrison Ave., Butte, Montana; 433 So Yelm, Kennewick, Washington.

370 weekly possible—home, spare time. Simplified mail bookkeeping immediate income—easy! Auditax, 24747EX, Los Angeles 34.

EQUIPMENT

For Sale

For Sale: Mill and industrial supply corp. in New England. Inventory 180,000. Established business with excellent lines. Profitable. Owners wish to retire for health reasons. Address FW-6679, Business Week.

"... finding out why blue-print paper is blue . . ."

KEUFFEL & ESSER starts on p. 190

der its own sub-management in its own plant.

• **K&E** had a feeling that its employees' morale would be improved in smaller plants. Each man would feel less like a clock number.

• **Research**—Many of the K&E operations will stay in Hoboken, in a plant much streamlined because it will be much less crowded. Among these operations is research. It will stay because, as K&E sees it, one of the best ways to keep up a steady exchange of ideas is to maintain a central research department that works for all plants.

K&E research wanders up and down all sorts of alleys. It takes in metallurgy and optics, for various kinds of instruments. It looks into chemistry, for drawing and reproduction paper. It tinkers with plastics and wood. Occasionally it farms out projects to research companies or colleges. One such project aimed at finding out why blue-print paper is blue—the idea being simply that the more you know about a product, the better you can handle it.

• **Tolerance**—Keuffel & Esser's research men are often called on to work out nightmarish problems for customers. This sometimes involves the company in designing and building a totally new instrument. When the Empire State Building was constructed, for instance, its engineers wanted to know exactly how much it swayed in the wind. K&E designed a special instrument to look up through a well from the basement to the roof, and to measure the sway by fixing on a grid planted over the well opening. (Contrary to a fairly widely held opinion, the building sways less than an inch from vertical in all but hurricane-velocity winds.)

This instrument, measuring fractions of an inch from a distance of over 1,000 ft., had to be built to extremely close tolerances. According to Pres. C. W. Keuffel, "It wasn't too hard." Close tolerances are a part of the company's daily life. Some of the lenses it makes are polished to accuracies measured in millionths of an inch. There was once a time when delicate parts of a transit had to be made between 2 and 4 in the morning, because at all other times heavy trucks rumbling through Hoboken upset the nervous machinery.

The company's jittery attention to accuracy is such that its advertising manager, an affable Englishman named P. Howard Barringer, was once reprimanded sternly by one of the old-line presidents for saying something was excellent when it was only very good.

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Facing the Guaranteed Annual Wage

Now that agreement has been reached in Detroit, the guaranteed annual wage has lost, at the very least, that fearsomeness it had because no one knew what form it would take or how expensive it would be. But the impact of this new phenomenon remains highly speculative.

The United Auto Workers did not get a guaranteed annual wage. Instead, it got a program that will provide workers with unemployment benefits in addition to those provided by the states. This falls far short of a full-fledged GAW. But whatever it is called and however limited, it is a form of wage guarantee.

In the Pattern

As such, it is a further step in that evolutionary development—basic in America—that has provided greater security and stability within a dynamic enterprise economy. It is in the pattern established when industry set up its own pension funds to supplement federal social security. As the Detroit plan spreads, it is bound to accelerate changes, economic and social, that are already under way.

Over the past decade, the once sharp distinctions that set off the factory worker from the white collar worker have gradually faded. Differences in living standards have been erased. With employment high and wages rising, hourly workers have had what amount to assured incomes. Factory workers have, in fact, become part of the middle-class consumer market.

Accordingly, they have assumed heavy financial obligations, just like that portion of the population that receives regular salaries. And when workers took on mortgages and consumer credit obligations, it was inevitable that they should seek first to raise, and then to regularize their incomes.

A Powerful Prop

Although the insuring of workers' incomes cannot by itself produce permanent prosperity, it should be another substantial stabilizing factor in our economy. If a general business decline occurs, it will serve as a powerful prop. It might not prove effective in countering a major depression, but the other so-called economic stabilizers are not guaranteed to work, either.

The negotiators in Detroit were not thinking in depression-terms. The negotiations were possible only because the industry has enjoyed a consistently high level of employment. And it was the vigorous competition between General Motors and Ford that led to agreement without strikes.

By any reckoning, the settlement is expensive. But it is not an incalculable price. Ford's John Bugas flatly stated that "this plan has a definitely predictable cost."

He did not underestimate the problems it posed, but he expressed confidence that Ford, at least, will be able to live with it while maintaining prosperous growth. GM, too, feels the same way.

Many businessmen take a different view. They feel that though the increase in stability is desirable, it will cripple the dynamism of industry (BW—Jun.11'55,p29). They claim that businessmen who are confronted with increased costs brought by the need to set up insurance funds may become standpat and conservative, fearful of enlarging their labor force, unwilling to expand.

Some companies may adopt this approach, but experience shows that the most successful companies have been able to accommodate themselves to higher costs. Higher wage costs, in particular, have generally led to regularizing production and more mechanization. This has not meant any over-all rise in unemployment. On the contrary, the demand for labor has increased along with the increase in productivity.

Incentive to Expansion

If the past is any guide, then, the introduction of private insurance, with its increase in labor costs, should be an incentive to greater production and expansion. Certainly it is true in the case of Ford, which this week announced it was going ahead with plans to build a new engine plant in Lima, Ohio. This project is only the first of a series that will be carried out in Ford's long term expansion program.

The costs of insuring workers may prove a heavy burden, especially to inefficient companies. But this is inherent in our free competitive system, where inefficiency is synonymous with red ink. Increased costs have always been an acid test of management efficiency. Those firms that face failure because of their inefficiency cannot place all the blame on the costs of such things as insurance funds. These will expose the weakness of an already weak firm and accelerate its decline, but they will not be the basic cause of failure.

Test for Management

Business will have to face up to the fact that what has been established in Detroit will become a pattern in the fabric of our economy. Whether it comes in the UAW form or through improving the unemployment compensation system, it will cost money.

Nevertheless, increasing workers' security is a challenge that industry must meet. Its great record for achieving rising productivity and output, is once more put to the test. Prosperity—and profits—depend on management's ability to maintain stability as it expands. This will require all the dynamic qualities that American industry can command.

"BIG ROCKER"

World's Largest Tube Reducing Machine

Protected by the World's

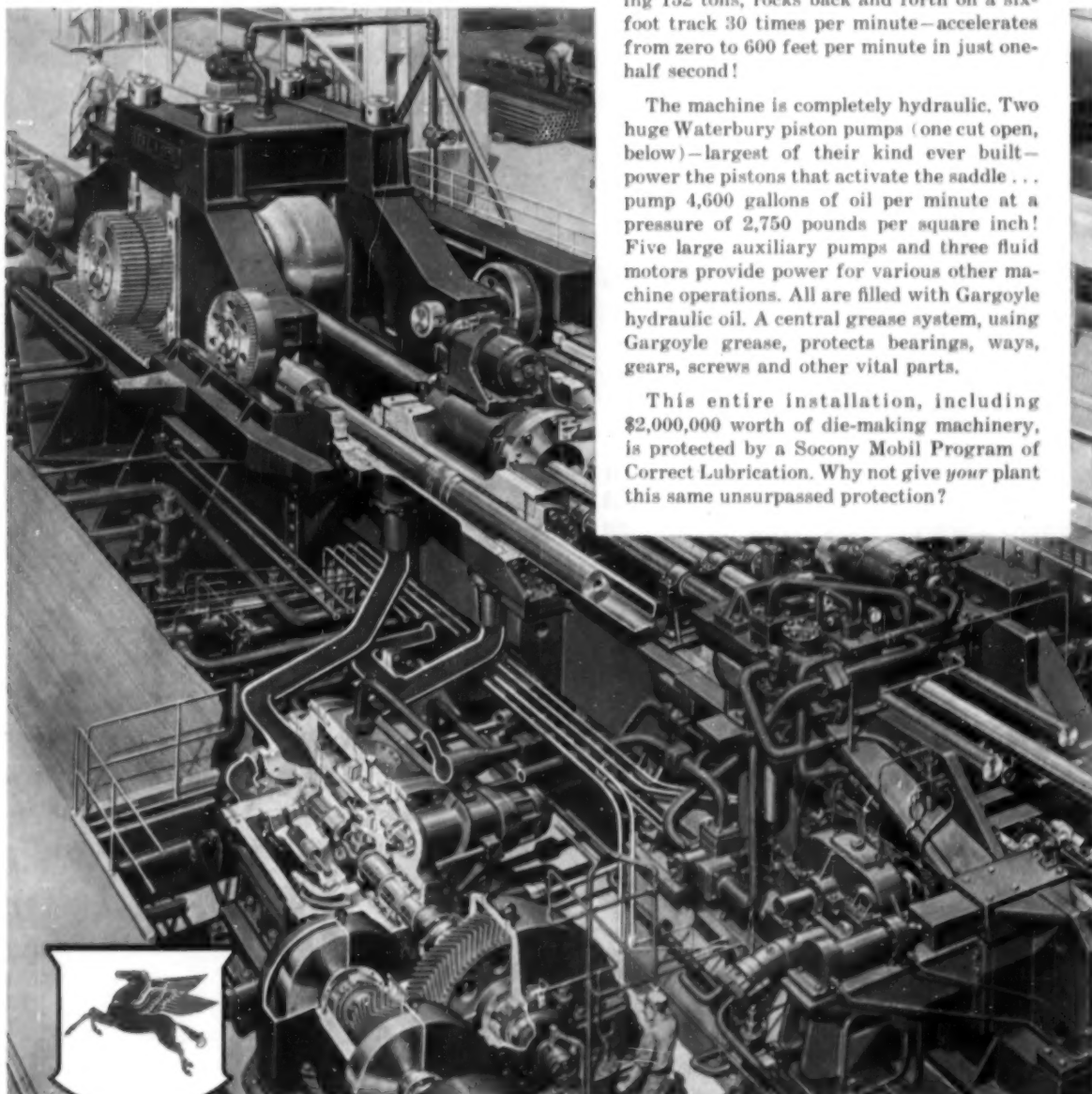
Greatest Lubrication Knowledge

It's 100 feet long, three stories high, weighs 675 tons! It's the world's largest tube reducing machine, built by E. W. Bliss Co., for the Tube Reducing Corp., Wallington, N. J. This giant takes rough, 18-inch O. D. cold steel tubing and reduces it to between 17- and 9-inch tubing. Finished tolerances are precise.

Heart of the Big Rocker is the "saddle" (top) which holds the huge dies that shape and stretch the tubing. This saddle, weighing 152 tons, rocks back and forth on a six-foot track 30 times per minute—accelerates from zero to 600 feet per minute in just one-half second!

The machine is completely hydraulic. Two huge Waterbury piston pumps (one cut open, below)—largest of their kind ever built—power the pistons that activate the saddle . . . pump 4,600 gallons of oil per minute at a pressure of 2,750 pounds per square inch! Five large auxiliary pumps and three fluid motors provide power for various other machine operations. All are filled with Gargoyle hydraulic oil. A central grease system, using Gargoyle grease, protects bearings, ways, gears, screws and other vital parts.

This entire installation, including \$2,000,000 worth of die-making machinery, is protected by a Socony Mobil Program of Correct Lubrication. Why not give *your* plant this same unsurpassed protection?



SOCONY MOBIL *Correct Lubrication*

FIRST STEP IN CUTTING COSTS

SOCONY MOBIL OIL COMPANY, INC., and Affiliates: MAGNOLIA PETROLEUM COMPANY, GENERAL PETROLEUM CORPORATION
Formerly Socony-Vacuum Oil Company, Inc.

Keeping America on the GO...with **TIMKEN** Tapered Roller Bearings



Now $1\frac{2}{3}$ miles
 $1\frac{1}{3}$ mile of "Roller Freight" cars to speed
Western Maryland shipments

EVER notice that most freight cars have boxes with hinged lids on the ends of every axle? They're what railroad men call journal boxes, and they contain oil-soaked packing to lubricate the turning axles. Well, you won't find boxes like that on these Western Maryland freight cars. The axles of these cars roll smoothly on Timken® tapered roller bearings instead of sliding on old-style friction bearings.

That's the difference between ordinary freight cars and "Roller Freight". Shipments that go "Roller Freight" ride just as smoothly and swiftly as a passenger in a crack streamliner.

We ran the original version of this advertisement last year when Western Maryland put the above 50 roller-bearing-equipped hopper cars in operation. Since then, they have added 50 seventy-ton covered hoppers and 17 "piggy-back" flat cars on Timken tapered roller bearings—and an additional 100

"Roller Freight" cars are now on order.

"Roller Freight" cars speed deliveries for Western Maryland shippers by eliminating the number-one cause of freight train delays, the hot box problem. Unlike cars with friction bearings, "Roller Freight" cars provide delay-free dependability that gets shipments where they're going—on time.

Much as "Roller Freight" means to shippers, it can mean still more to the railroads. When they put roller bearings on all freight cars, they'll save on lubrication, labor, inspection, and repairs. An estimated \$190 million a year!

Timken bearings are designed and precision manufactured to have true rolling motion. To insure their quality, we use our own nickel-rich Timken alloy steel. We're the only bearing manufacturer in the country that makes its own steel. The railroads, like all industry, choose Timken bearings to keep America on the go. The Timken Roller

Bearing Company, Canton 6, Ohio.
Canadian plant: St. Thomas, Ontario.
Cable address: "TIMROSCO".



This trainman is holding two Timken tapered roller bearings as they are mounted on the end of a freight car's axle to eliminate the hot box problem, cut operating and maintenance costs to a minimum.

Only **TIMKEN** bearings roll so true, have such quality thru-&-thru

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